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# The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

An Illustrated Record of Mining, Metallurgical, Railway, Financial, Industrial, And Engineering Progress.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 3184.—VOL. LXVI.

London, Saturday, August 29, 1896.

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Refers to his Share Market List on Page 1096 of to-day's Journal.

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Thomas, Assoc. M.Inst. C.E., F.G.S., M.I.M.M.—MATHEMATICS AND  
THEORETICAL MECHANICS; Mr. A. Bell, M.A.—PRACTICAL  
MECHANICS; Mr. J. O. Keast.—MACHINE DRAWING, STEAM; Mr. T.  
J. Harvey.—PHYSICS; Mr. C. Davis.—VANNING; Mr. J. Reynolds.—ART  
SUBJECTS, PLANE AND SOLID GEOMETRY, BUILDING CONSTRUCTION;  
Mr. F. J. Gardener.

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For Index to Advertisements see Page 1090.

For Literary Contents see Page 1102.



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SEE ILLUSTRATED ADVERTISEMENT (PAGE 1091).

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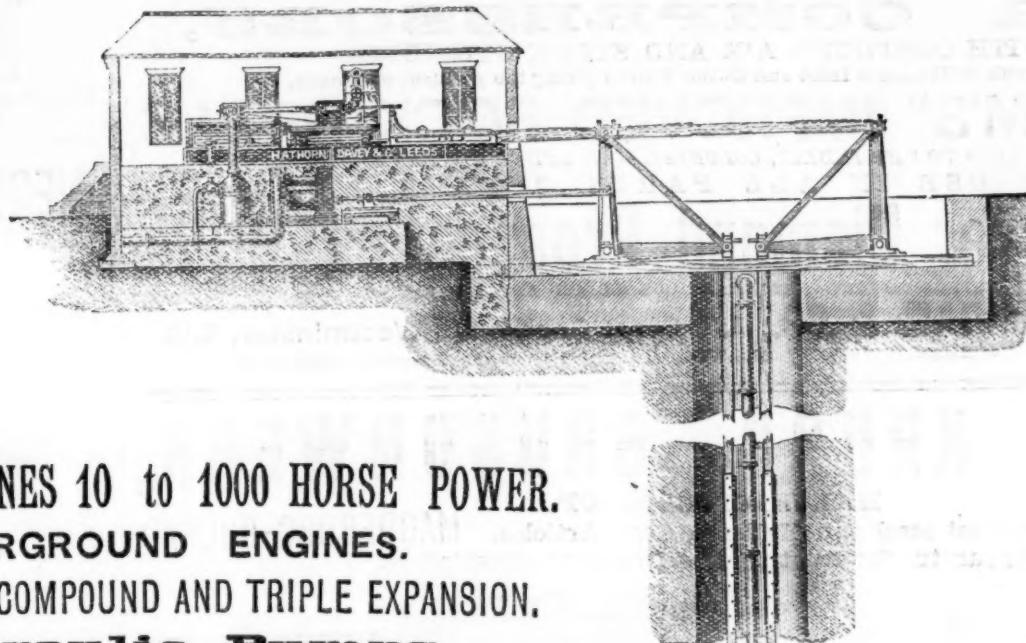


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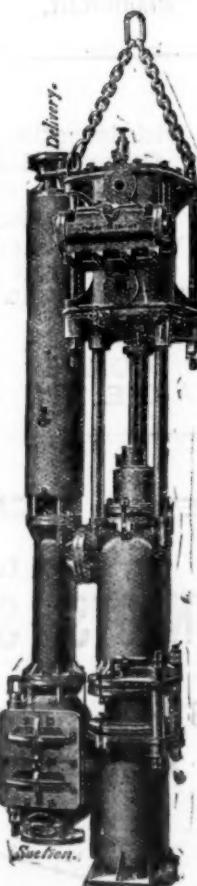
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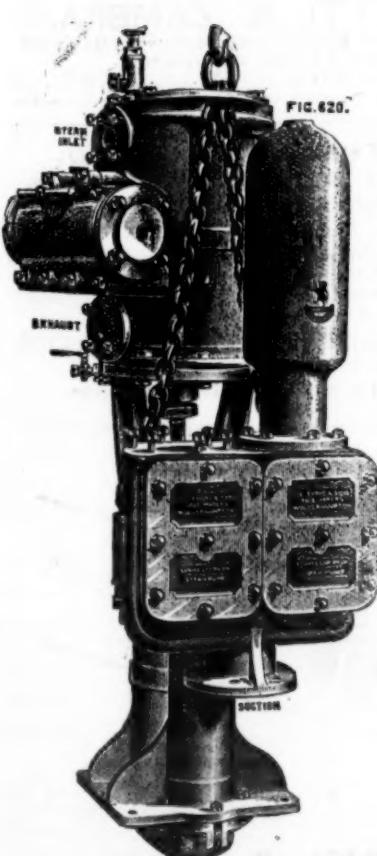
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FIG. 875, "FLUOMETER"  
PATENT STEAM VACUUM  
PUMP.



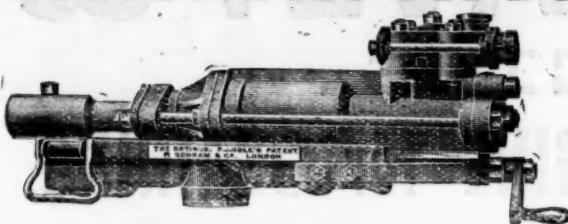
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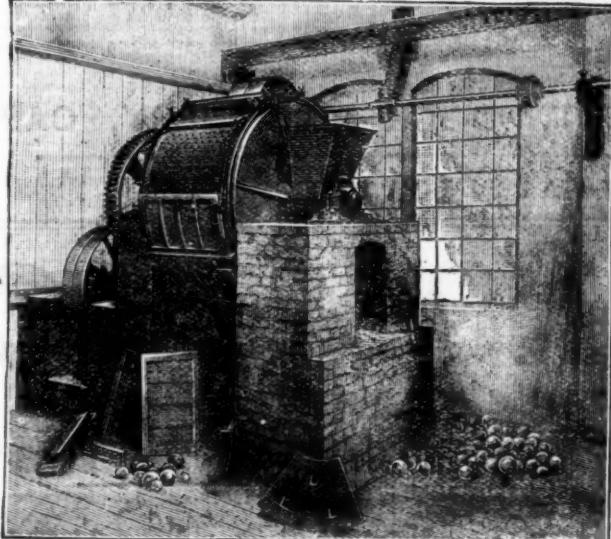
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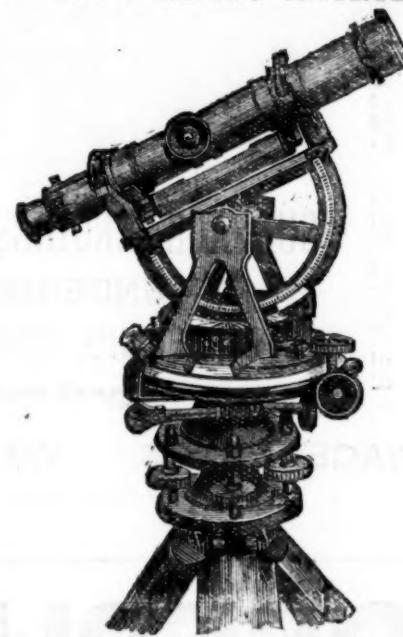
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59-61, Waterloo Street, Glasgow.

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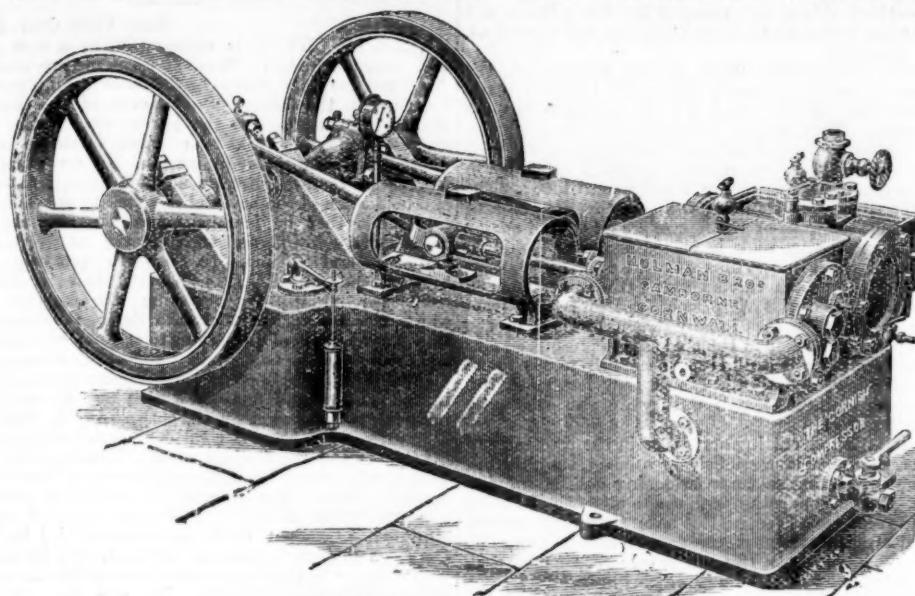
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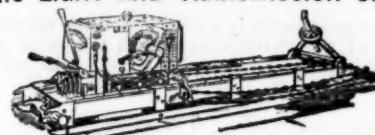
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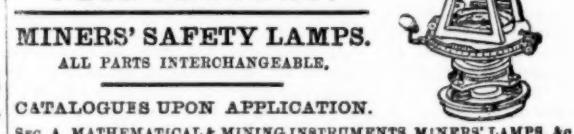
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## NEW PATENTS.

LIST OF APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs. Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

- 1702 Nicholas Marek, 24, Southampton Buildings, Chancery Lane, London.—Improvements in rotary engines.—August 13.
- 1703 Benoît Demont, 45, Southampton Buildings, Chancery Lane, London.—Improvements in rotary engines.—August 13.
- 1704 Robert Luis Weighton and Donald Barns Morison, Hartlepool Engine Works, Hartlepool.—Improvements in engines having two or more cylinders.—August 11.
- 1705 Owen Meredith, 46, Laird Street, Birkenhead.—Improvements in furnaces and flues for steam boilers.—August 11.
- 1706 Anthony Stevenson, 155, Christleton Road, Chester.—Improved appliances or apparatus for the consumption of smoke in steam boiler and other furnaces.—August 11.
- 1707 Walter Wooldridge, 5, Strand, Southampton.—Improvements in explosion engines.—August 11.
- 1708 Henry Harris Lake, 45, Southampton Buildings, Chancery Lane, London.—Improvements in rotary steam engines.—August 11.
- 1709 Phillip Arthur Newton, 6, Beams Buildings, Chancery Lane, London.—Improvements in valve gear for direct action engines.—August 11.
- 1710 William Bateman Orleton, 111, Hatton Garden, London.—Improvements in steam or other fluid pressure engines.—August 13.
- 1711 William Delton, 55, Chancery Lane, London.—Improvements in steam generators.—August 14.
- 1712 William Morris, 55, Chancery Lane, London.—Improvements in injectors for steam generators.—August 15.
- 1713 Joseph Lever, Dutton Street, Manchester.—Improvements in the prevention of smoke in connection with steam boiler furnaces.—August 15.
- 1714 These specifications will be published on September 5.—
- 1715 Wileke.—Steam generators. 1895.
- 1716 Prestwich and the Protector Lamp and Lighting Company (Limited).—Miners' and other safety lamps. 1895.
- 1717 Thwaites and Gardner.—Apparatus for rendering iron blast furnace gases available for working gas motor engines.

## JOINT-STOCK COMPANIES.

### NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:

- Maritana (Limited).—Registered August 11 by Marshall and Marshall, 3, Lincoln's Inn Fields, W.C., with a capital of £200,000 in £1 shares, to acquire by purchase or otherwise the gold mining leases known as No. 2 E and No. 37 E, situate in the district of Kalgoorlie or Hannan's Find, in Western Australia.
- Rossland War Eagle Gold Mining Company (Limited).—Registered August 11 by Walter Webb and Co., 23, Queen Victoria Street, E.C., with a capital of £550,000 in £1 shares, to adopt and carry into effect an agreement, made May 6, between D. C. Corbin of the first part and J. H. Rothschild, for and on behalf of this company of the second part, for the acquisition by purchase or otherwise of certain lands, estates, mining and other properties in Canada.
- International Development Corporation, British Columbia (Limited).—Registered August 13 by W. Webb and Co., 23, Queen Victoria Street, E.C., with a capital of £200,000 in £1 shares. To adopt and carry into effect an agreement expressed to be made between W. E. M. Crawley of the one part, and this company of the other part, and this company of the other part, and to acquire, work, deal with, and generally turn to account, in such manner as the company shall see fit, any mines, mining rights, &c., in British Columbia. Registered office, 31, Lombard Street, E.C.
- Hannan's Exploring Syndicate (Limited).—Registered August 13 by S. Flower, 1, Great Winchester Street, E.C., with a capital of £15,750, in 15,000 £1 ordinary and 15,000 £1, deferred shares. To search for, prospect, examine, and explore mines and ground supposed to contain minerals of precious stones in West Australia or elsewhere. Registered office, 29, Cornhill, E.C.
- Perth Mining and Trading Syndicate of Western Australia (Limited).—Registered August 13 by Homer and Haslam, 4, Copthall Chambers, E.C., with a capital of £20,000 in £1 shares, to carry on the business of financiers, capitalists, merchants, smelters, explorers, prospectors. Registered office, 32, Old Jewry, E.C.
- New Zealand Broken Hills Gold Mining Company (Limited).—Registered August 13, by Anderson, Holland, Atkin, and Co., 4, Queen Victoria Street, E.C., with a capital of £300,000 in £1 shares, to acquire and deal in real and personal property of all kinds, and, in particular, stocks, shares, and debentures of any company, mining or otherwise, in New Zealand.
- Lord Brassey Gold Mines (Limited).—Registered August 13 by R. Brooks, 9, Carteret Street, Westminster, with a capital of £120,000 in £1 shares, to adopt and carry into effect an agreement, made August 10, 1896, between Richard R. Prior and this company (by Joseph Townsend) for the acquisition by purchase or otherwise, of certain mines, mining rights, claims, &c., situated in the 25-mile district, West Australia. Registered office, 16, St. Helen's Place, E.C.
- United Colonial Exploration (Limited).—Registered August 13 by Burn and Berridge, 11, Old Broad Street, E.C., with a capital of £50,000 in £1 shares, to adopt and carry into effect an agreement between the Dhuhill Prospecting Syndicate (Limited) and this company for the acquisition of the business, undertaking, assets, liabilities, &c., of the said Dhuhill Prospecting Syndicate (Limited). Registered office, Winchester House, E.C.
- Otago Syndicate (Limited).—Registered August 13 by Clarke, Rawlins, and Co., 58, Grosvenor House, E.C., with a capital of £20,000 in £1 shares (25 founders), to acquire, develop, turn to account, and deal with any mines, mining rights, and metalliferous land in the South Islands of New Zealand or elsewhere. Registered office, 30, St. Swithin's Lane, E.C.

GERMAN COAL IN AUSTRIA.—Large quantities of Upper Silesian coal are just now being imported into Austria-Hungary. The total of such imports for the first half of the present year is returned at 2,356,948 tons, as against only 1,915,661 tons in the first six months of 1895.

MESSRS. F. C. MATHIESEN and Sons' admirable little monthly mining handbook for mid-August has reached us, accompanied by their annual tabular statement of Mining Dividends and Rights for 1896. As usual, we can heartily commend both these publications. We may, however, say that in giving the Mining Make-up, Name, and Account day, there is no correspondence between the day of the week, and the date of the month.

## CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

"We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given."

Urgent notice is given that by which tenders must be delivered, in nearly all cases further information can be obtained on application to the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

Coal, August 31 (Warwick).—For supplying the Town Council with coal six months from September 29. Tenders, specifying description and price, to Mr. Hrabson Campbell, Town Clerk, by noon on 31st inst. Forms of tender can be obtained at the Town Clerk's Office.

Copper Wire, September 1 (The Hague).—The Consul-General of the South African Republic demands tenders for the supply of copper wire for the Telegraph Department of the South African Republic. Tenders which have not been received before September 1, Dooslaerstraat No. 8, at Amsterdam, will not be regarded. Specifications will be procured on demand by F. J. Bellinfante, late A. D. Schinkel, Paveljoensgracht, The Hague, Holland, at the price of £sh. per ton.

Pumps, September 1 (Stroud).—For the supply and fixing at the works of a double-barrel lifting pump, with suction pump and other fittings complete, for the guardians. Specifications may be seen at the office of Mr. Fredk. Winterbotham, clerk, Union Offices, John Street, Stroud. Tenders to be sent to the Clerk by September 1, marked "Tender for Pumps, £c."

Borehole, September 2 (Ulverston).—For sinking a 3-inch borehole in the public hall at Ulverston, for the Ulverston Rural District Council. Present depth of well about 30 feet. Tenders to state price per foot for boring, and to include all charges for removal of plant, &c., to and from Bawcliff. Tenders to be sent to Mr. Chas. W. Dean, Clerk, 3, Benson Street, Ulverston, before 5 p.m. on September 2.

Deepening Fords, September 2 (Stirling).—For the deepening of the town and abbey roads on the River Forth, near Stirling, for the Forth Navigation Commissioners, in terms of plan, specification, and form of tender, which may be examined at the chambers of Messrs. D. and C. Stevenson, civil engineers, 24, George Street, Edinburgh. Tenders to be lodged with the Town Clerk, Stirling, by September 2.

Wire Rope, September 3 (Antwerp).—For the supply of 45 galvanised steel wire cables, for the Antwerp Dock. Particulars at the station d'Anvers-Est.

Ironwork, September 8 (Alexandria).—For the supply of ironwork for doors and windows, for Railway, Harbour, and Telegraph Administration of Alexandria. Particulars from the Inspector of Stores at Gabbari, where samples can be inspected.

Coral, October 19 (Port Louis, Mauritius).—Tenders will be received at the Treasury, Port Louis, Mauritius, until noon on October 13, for the supply of 400 tons of South Wales and 4575 tons of Australian coal, for the use of the Railway and Port Departments. Printed forms of tender and conditions of contract may be obtained on payment of £s, on application at the office of the Crown Agents for the Colonies, Downing Street, London.

Welsh Coal, October 15 (Alexandria).—For the supply of 110,000 to 120,000 tons of Welsh coal for the Department of the Railways and Telegraphs of the Port of Alexandria. Particulars and terms obtained from the President of the Department at Cairo.

## SILVER MINING IN BRITISH COLUMBIA.

By Mr. E. D. INGALL, M.E.

Assoc. Royal School of Mines, Eng.

Chief of Mining Division, Geological Survey of Canada.

UNTIL a comparatively recent period the mineral production of the Province of British Columbia was almost entirely confined to coal and gold, the latter chiefly obtained by washing the shallow auriferous gravels distributed widely throughout the province.

The discovery and working of veins yielding silver ores was, with the exception of a few scattering discoveries, subsequent to 1880.

It is not the intention, in this paper, to go into any details as to the history of the silver mines of the province which are so admirably dealt with in the report of Dr. G. M. Dawson, on "The Mineral Wealth of British Columbia," issued with the annual report of the Geological Survey for 1887. A few items may, however, not be amiss as prefacing the more immediate subject of this paper—viz., the more newly-discovered silver veins of the West Kootenay district.

According to Dr. Dawson, the large deposit of galena now known as the Blue Bell Mine, and situated on the east shore of Kootenay Lake, was discovered as early as 1825 by the botanist Douglas, and amongst the earlier discoveries of this class of ores is that in the coast range of mountains at Hope, on the Fraser River, in 1871. The ore discovered there was described as "argentiferous grey copper," containing lead, copper, antimony, and iron. In 1882 a number of claims were located on discoveries at Stump Lake in Yale district, of veins carrying ores rich in gold and silver, and from that date to 1889 various camps came into greater or less prominence in that district and in those of East and West Kootenay, which together constitute the south-east corner of the province.

At the time of the writing of Dr. Dawson's report in 1888, argentiferous ores had been reported also from various points in the Northern districts; in Cariboo, Omineca, Cassiar, and further north in the Yukon country, but none of these have come into any prominence so far, doubtless on account of the numerous drawbacks due to lack of good communications with the outer world. Before passing then to the subject proper of this paper, it may be well to point out the various other districts in the province where veins carrying argentiferous ores have been found and more or less worked. It is noticeable that most of these points the ores are mixed, carrying much copper sulphurets, and are often antimonial and arsenical, differing in this respect from the prevalent ore of the Ainsworth, Hendryx, Slocan, and Illecillewaet districts, where argentiferous galenas and the products of their decomposition take precedence over all others. The points to which it is desired to draw special attention in this paper are the results of studies made by the writer in 1892, when in British Columbia for the Geological Survey. The time at disposal allowed only of the study of the Illecillewaet, Ainsworth, and Slocan, sub-districts of West Kootenay where, however, a large number of claims were visited and examined with a view to getting the general features of the veins.

*Illecillewaet.*—Beginning then with the district tributary to Illecillewaet on the Canadian Pacific Railway, we have within a radius of from 5 to 10 miles, a number of claims upon which more or less work has been done, among which are the Lanark and Maple Leaf, with the Isabella, the Jumbo, the Sanquahar, the Cariboo and others all lying north of the Canadian Pacific Railway station, and all within 5 miles of it.

Some eight miles north-east of the same place lie the Gold Hill and Copper Hill group of claims, whilst about 10 miles south-east from the headquarters of the district at Illecillewaet lie the Fish River group, among which are the Dunvegan, Elizabeth, Edinburgh, and Fishburn's claims. These are reached by a trail of some 15 miles in length, passing over the divide between the waters tributary to the Illecillewaet River and those of the Fish River, which runs southerly into the north-west arm of the Upper Arrow Lake. All the above-mentioned groups are staked out on fissure veins which, excepting those of Gold Hill and Copper Mountain, cut a formation consisting of shaly rocks generally dark in colour and often quite black, and carrying a large percentage of carbonaceous matter. These are accompanied by grey bands of a calcareous nature and often of considerable width. In many places throughout the district the presence of intrusive igneous rocks is evidenced by tongues and dykes of the same cutting the sedimentary rocks, and a little east of the Fish River group the main body of one of these intrusive areas is reached.

The enclosing rocks of the Gold Hill and Copper Mountain groups are in general chloritic and talcose schists, with intercalated calcareous belts which, however, are distinctly different in appearance from those of the last mentioned, affecting rather a greenish grey hue with a somewhat rusty weathered surface. The schistose rocks of the series are generally greenish and yellowish grey, so that the general colour of this formation contrasts plainly with the darker greys and blacks of the last mentioned. In the first mentioned, or black shale series, the ores are mostly galena, or galena and zinc-blende mixed, whilst in the schistose formation galena veins are found, but others have also been located carrying rich copper sulphurets assaying well in silver, and said also to carry some gold. At Copper Hill, for instance, in a vein cutting the schists and carrying copper glance and yellow sulphurite in a gangue which is sometimes white translucent quartz, and sometimes seems to be ferruginous dolomite. The ore is said to assay 61 per cent. copper, and \$20 gold and \$8 silver. All the rocks of the district, as might be expected in a mountain range, are folded and contorted, and the detail of their distribution would take a long time to work out. The veins cutting the black shale series show very similar characteristics to those described later as occurring in the Slocan district. They carry galena as the chief ore in veins and masses in a gangue which is generally ferruginous. At places much zinc-blende is intermixed, especially where larger bodies of ore occur in connection with the line veins.

Some few veins have been located, in which the gangue is quartz with galena and pyrites disseminated. The detailed description of the Slocan district following serves equally well for this district. Passing south we come to the well-known Slocan camp, the position and details of which are well shown on the map. Late in the fall of 1891, a party of discouraged prospectors were making their way over the mountains towards Ainsworth, and, being very short of provisions, were making the best time possible, when, in descending a gully to the east fork of Carpenter Creek, which runs into Slocan Lake, they lighted upon an extensive outcropping of ore. Without loss of time, claims were staked out and specimens were secured which, when assayed, gave such encouraging returns as to cause a rush to the district in the following spring, and the consequent discovery of a large number of rich veins, covering an area about 10 miles by 17, along the valley of the Kaslo River and between its head waters at Bear Lake and the east shore of Slocan Lake. The rocks of this district present the same general features as those in the vicinity of Illecillewaet.

The bulk of the claims of the district have been staked out on veins cutting rocks of the black shale series with their associated calcareous bands. They show the same variations in character, being soft and highly graphitic at places, and harder and more compact at others, generally from the proximity of intrusive igneous rocks, and are thus often highly altered, showing chalcostilite, &c. These intrusive rocks are found throughout the district, showing as dykes of various thicknesses. They are light in colour, with a preponderance of the acidic mineral constituents, orthoclase felspar and quartz constituting, as a rule, the bulk of their substance. This association of rocks in general occupy the southern side of the valley of the Kaslo River, and extend some miles to the south, where they are said to abut on a large area of granite.

On the north side of the valley of the same river, the schistose series of rocks is largely developed, being in many places serpentinous. In this series of rocks a number of veins have been located. They show as fissures varying in thickness from a few inches to 2 or 3 feet, carrying the ore, which is galena, in solid ribs. These ore ribs are generally imbedded in a soft ochreous gangue, sometimes of a pasty consistency. The thickness of the ribs varies from a few inches up to a foot or two. Occasionally the walls of the fissure are lined with quartz crystals, and the enclosing rock is rusted some few inches in from the walls of the vein. Veins of solid quartz also occur occasionally, but those seen carried very little mineral. The veins in this schistose series of rocks are apt to be free from some of the irregularities occasionally shown by those in the black shale series. The veins in the shale series present similar features to those already described as occurring in the same series in the Illecillewaet district. Whilst they frequently run for long distances with the formation, they are also constantly found cutting across it.

Where a vein is found cutting across, or in the proximity of one of the calcareous bands previously mentioned, they are apt to show some interesting features, widening out or forming large pockets of ore in connection with the vein. Some of the big shows of the district have been of this nature, and have proved very disappointing, their pockety nature being shown on development. When, however, the parent vein has been located, it has been found to be persistent, which will be found to be true for most of the fissures proper. Where they cut the slates, the veins at places show a considerable width of brecciated vein stone, angular pieces of the enclosing rock being cemented together by quartz and other gangue and ore minerals. The commonest occurrence, however, is to find veins of from a few inches to 2 or 3 feet in width, carrying galena in solid ribs, nuggets, and boulders in a rusty ochreous and sometimes clayey filling.

The galena varies in grain, from large cube down to that with a fine steely fracture, as shown by the specimens. It is sometimes enriched by the presence of ruby silver and the richer silver minerals scattered through it. What is known as "carbonate" ore occurs with the galena, but this is not really carbonate of lead, as one might suppose, but is the ochreous gangue material in which the silver occurs disseminated in the metallic or native condition, and in the condition of the richer silver minerals with, doubtless, some carbonate of lead. The whole, probably, results from the decomposition of the gangue and of the silver-bearing galena of the vein. Other minerals are associated with the galena in places and in varying quantities. Of these, zinc blende is the most prominent, iron pyrites occurring in fair quantity, and other metallic minerals being only occasional. The pure galena in solid ribs seems to affect more particularly the narrower veins, cutting the shales, whereas the big developments in the calcareous parts carry generally a large proportion of zinc blende which lessens their value, this mineral being objected to by the smelters, when its percentage is large. Another class of the veins found show various rich arsenical and antimonial silver minerals in a gangue composed principally of quartz.

Development work on these veins has, in a number of cases, opened up most promising exposures of ore. In one case a tunnel was seen on a new prospect where, for all its length of about 75 feet, it was estimated that the ground broken had been from 50 to 60 per cent. pure galena, assaying 125 ounces to the ton. Or again, at another place, a prospect pit was seen showing a 2 feet rib of absolutely pure steel galena with ruby silver, the ore assaying 860 ounces to the ton. When one sees such exposures of ore as these at a number of places in the district as the result of merely preliminary development work by the prospectors themselves, and taking into account the many other veins found in the district having good, if not quite so extensive, shows of ore, one cannot help feeling that the district has a very hopeful future before it. These ores are rich in silver, as shown by the results of some 50 assays made in the chemical branch of the Geological Survey, of specimens of galena collected by myself which run from 50 ounces to 360 ounces, the majority from the black shale series in the Slocan district averaging, perhaps, 100 to 125 ounces per ton. Some specimens of so-called "carbonate" gave little or no silver, whilst two specimens of this class of ore from different claims gave 700 ounces and 1630 ounces respectively. The galena from the veins on the schistose formation seems to average lower in silver than that occurring in the shale formation.

The other districts of West Kootenay, now prominent in respect of their silver ores, are Ainsworth, Hendryx, and Toad Mountain districts, all of which have been well described by Dr. G. M. Dawson, of the Survey, in his report on West Kootenay. The ores of the latter district, however, are more mixed, copper and the richer silver minerals occurring with the galena. They also carry a little gold. Other camps which have come into prominent notice of late are those of Goat River and Trail Creek. Three smelters have been erected in the district, one at Golden, one at Revelstoke (now washed away by floods), and one at Pilot Bay on Kootenay Lake. The latter, however, has not been completed owing to some disagreement amongst the capitalists concerned.

The two former works consisted each of a single water-jacket furnace with roaster and appurtenances, but the Pilot Bay works have been projected upon a more extensive scale. The plant includes: Concentrator building, 85 by 100; sampling works, 100 by 108; roaster, 100 by 170; smelter, 55 by 95; refinery, 120 by 245; assay office, 20 by 80; boiler house, 40 by 48; blacksmith shop, 20 by 40; machine shop, 20 by 40; office, 30 by 45; boarding house, 25 by 60.

As none of these works have so far been running, all the ore produced has been shipped to smelters in the United States at Tacoma and San Francisco. Pack trails traverse the country, and some few wagon roads connect the chief camps with steamer navigation on the lakes and rivers, whereby connection can be made with the Canadian Pacific Railway and the American railways to the south, whilst other projected connecting railways now being built will give a still better chance of success. To a certain extent the mines are waiting the completion of these better means of communication, which are rendered the more necessary by the present low price of silver, but notwithstanding this discouraging feature and the existing commercial depression, the amount of discovery and development work prosecuted has been quite considerable, and we can, I think, still feel very hopeful for the future of silver mining in British Columbia.

## MINING IN THE UNITED STATES.

(FROM OUR OWN CORRESPONDENT.)

The future of Cripple Creek—Wild Cat and Wild Finance.—A word of Caution.—A French Government Commission of Enquiry

NEW YORK CITY, AUGUST 18.

CRISSLE CREEK is entering upon a new phase of its singular history. Some of its mines are attaining depth, and the stock dealers of Colorado Springs and Denver are "sitting on the fence." Prices, even of the dividend-paying shares, have dropped to the lowest level of this year, and a further descent is looked for. This is shown by the terms quoted for operations on margin. If, for example, a New Yorker be tempted by present quotations, and desire to buy and hold some of the best and most active stocks for a rise, he soon finds that he is much more sanguine than the local speculators. Even on such stocks as Victor, Portland, Isabella, and Union, he has to put up and maintain a margin of 50 per cent., and is charged 2 per cent. per month for carrying the balance. In other words, the Denver and Colorado Springs dealers confess that they regard a fall of quotations to one-half of even the current low rates as likely enough to happen. This flatness of market and expectation is, in some measure, due to the state of things in the political and financial world; but its real foundation is uncertainty as to whether the Cripple Creek district will show high values in depth. A good deal of this uncertainty is attributable to the proceedings of Mr. Stratton, the whilom carpenter, who is now the millionaire owner of the famous Independence Mine. This property is reputed to have something like \$5,000,000 of ore in sight and blocked out ready for stopping; but a sight of its riches was denied to M. Edouard Cunene and M. Ferdinand Robellaz, two French engineers, who visited Cripple Creek some three weeks ago at the request of some Parisian bankers. No one can understand why these gentlemen should have found the Independence and Portland Mines closed against them, if the developments of ore be of a really satisfactory character. I conversed yesterday with an eminent mining authority just back from Cripple Creek. He told me that among the working miners of the camp stories are afloat as to the wonderfully rich telluride mineral of the Independence having given place to comparatively low grade sulphides in the bottom levels. Some people consider these stories to be virtually confirmed by Mr. Stratton having discontinued ore extraction pending the completion of his large milling plant now nearly finished. Be this as it may, the fact remains that the future of all the present mining companies of Cripple Creek will be regarded as uncertain until depths of from 1000 to 2000 feet shall have been attained and explored.

Meantime there is considerable activity in the district, and shipments of ore have begun from many surrounding points, which at the outset were regarded as unpromising. It is now found that, in addition to the group of breccia-filled craters originally discovered, the surrounding granitic country rock has in many other places been fissured and disrupted by forces acting from below. No fresh centres of volcanic activity have as yet been met with, but many acres have been explored which are characterised by intrusions of phonolite and other igneous rocks, accompanied by the usual deposits of vein matter and auriferous minerals in the shrinkage cavities between the dykes and the country rock, and in all nearly lines of fracture. The new ore bodies thus met with are similar in character and richness to those on Battle Mountain itself. Accordingly there is not likely to be any falling off in the production of Cripple Creek. It may, on the contrary, be expected that the list of shipping mines, and the total value of the shipments from the camp, will long continue to steadily increase.

It may also be expected that considerable changes will take place in the business methods of the operators. The Cripple Creek companies are numbered by hundreds, and are of an uniform type. A claim is located, and a little exploration work is done. A company is then incorporated, with a capital of 1,000,000 or 2,000,000 shares of \$1 each. This is all issued as fully-paid to the promoters in exchange for the mining claim, and the promoters therupon donate a certain proportion of the shares (usually one-fourth or one-third) to the company to be sold as "treasury stock" for the purpose of raising working capital. At first the shares are sold at from \$2 to \$5 per 100. Then the price is put up to 1 c. per share. A little later on it becomes 5 c. per share, and generally remains at about that figure, unless real progress is made in developing the property, in which case the stock is listed on one of the exchanges as a "prospect," and endeavours are made to create market dealings and establish quotations at gradually-increasing figures. If all should go well, the price may advance to 10 c. or 12 c., and when more than \$5000 worth of ore has actually been shipped the stock is moved into the list of "mines," where its future standing depends upon the views generally entertained as to the richness and permanency of the mining properties it represents.

This method of financing would be all very well if it were carried out in a really able manner. The investing public likes a bargain, and in this country, at least, prefer to buy shares at a huge discount rather than at par or premium. If the promotion stock were pooled, and the Treasury stock alone sold, the money provided by the public would be applied in developing the mines; and, as in Cripple Creek a claim may be made into a profit-yielding mine with a very small expenditure, the sale of the Treasury stock would in most cases make the company a success. But this practical procedure is seldom pursued. There is, too often, a mad rush by the promoters to sell their own shares, and the Treasury stock has to take care of itself. The public buy the 700,000 or so of the former at an average price of (say) 3 cents per share. This gives the promoters \$21,000 for what cost them, in all probability, the odd \$100. They clear out, smiling, and prepare another deal of a similar character. What does it matter to them if the company be left high and dry with 300,000 unsold shares in its Treasury instead of cash, with an unworked mining claim, and with no earthly prospects of ever making returns or paying dividends? Presently the investing public grow uneasy when nothing is heard of any mining results. Brokers are appealed to. They report that the shares are unsaleable. The shareholders deem themselves swindled, and take no pains to enquire into the circumstances of the case, or to put the affairs of the company upon a business-like footing. No one will step forward to incur the labour and expense of straightening out the matter. In this country investors are scattered over too vast an area to render common action practicable. The consequence is that the company becomes a dead letter, and the property is sold by the County authorities for taxes.

I have dwelt upon these matters because it is important for your readers to understand the "true inwardness" of Cripple Creek mining investments. Attempts are now being made, and

others are in preparation, to work up a market in England for parcels of stock which can no longer be easily sold to investors in this country. It is not simply a case of "wild-cat." It is "wild finance" that has to be guarded against. English brokers and investors should make sure that they are buying Treasury stock instead of relieving promoters. They should decline to buy the stock of any company that fails to appoint duly accredited representatives in New York and London, and that omits to keep such representatives supplied with detailed monthly reports of its financial and technical progress. They should even insist upon the stock certificates being officially marked "Treasury Stock." If these precautions be taken, the shares of American mining companies may be purchased and held with confidence, and many of them will be found to be solid and highly remunerative investments.

In some cases, of course, the investor who takes the pains to enquire before he buys will find that all the "wild cats" are not yet dead. Even in Cripple Creek, with all its wonderful ramifications of veins over practically the entire district, there are barren areas, invalid titles, alleged mines having no real existence, and projects composed merely of wind. It may be that the shares of companies formed to make money out of these frauds are being purchased by American investors. This fact is no criterion of intrinsic worth, and should not restrain the English buyer from enquiry. In any case American companies offering stock for sale in England should be required to furnish proofs of the statements they advance, and the authorities mentioned in such proofs should be personally communicated with before absolute credence is given; or, at least, that the common sense precaution should be taken of asking some firm or institution in New York to investigate and report as to what is known respecting the matter in general.

A somewhat singular story has just reached us from Cripple Creek. An additional pair of French experts have put in an appearance. Their names are M. Emile Du Marais and M. Emile P. Enders. They are said to be specially commissioned by the French Government to visit and report upon the gold districts of the United States and British Columbia. They expect to occupy about a year's time on the trip, and the object of their journey is to obtain accurate information for the guidance of French investors generally as regards the wisdom of furnishing capital for the working of North American gold mines. Here, in Wall-street, we are disposed to doubt whether the French Government has really taken any such step. If the story be indeed true we think the operators on the Bourse are wise in their generation.

## MINING IN NEW ZEALAND.

(BY OUR OWN CORRESPONDENT.)

**G**REAT activity continues to be displayed in our gold mining industry throughout the whole of New Zealand, both as regards actual development work, which is steadily proceeding, and the demand for suitable mines to place upon the English market. Owing to this demand, and the unearthing of new finds on different parts of the peninsula, large areas of auriferous land are being pegged out daily and applied for. In fact, this month has been the busiest ever experienced in the Wardens' offices.

Large areas of auriferous country are locked up at present, due to certain rights held by the Kauri Timber Company; but as that company have no claim upon mineral rights, it is fully expected that the New Zealand Government will resume those mineral rights, and throw the land open for gold mining purposes. It may be mentioned that some very valuable finds have been discovered on the lands referred to, and when once the miners secure *bone fide* titles, rich gold-bearing lodes will then be exposed and developed.

Information is coming to hand daily of the successful flotation of different properties situated in the various mining centres, which also assists to stimulate the spirits of the "wily pugger."

The great sensation of the day is that in connection with the Broken Hill Mine, on the Tairua gold field. It will be remembered that I paid a visit of inspection to this now discovery some time ago; and that in my letter which appeared in your issue of May 9, I made the remark that the discovery was a valuable one, and of considerable magnitude. Since then Mr. Jonathan Seaver purchased the option of floating this valuable mine on the London market. The option had to extend up to four months, and the amount of purchase was £10,000 cash and 42,000 shares fully paid up. During Mr. Seaver's term of option, a staff of miners were engaged to put in a low level crosscut to intersect the ore deposit at a greater depth. This work was duly accomplished, and the lode intersected proves to be phenomenally rich in bullion. Here the lode is more settled than what it was where first opened up at its outcrop, and after cutting into it for a distance of 8 feet, the purple andesite was again reached. A general assay of the whole width of the quartz body gave a result of £128 per ton. Picked stone, thickly laminated with blue sulphide, produced assay results from £300 to £400 per ton. It will be seen that the ore is immensely rich here at depth to what it was on the surface, thus proving that the lode is much more defined and reliable as depth is reached. The flotation of the property, however, is now at a standstill. As stated in my previous letters, I am of an opinion that this discovery will prove to be the richest argenticiferous lode ever opened up in the out-districts. Of course, it will be some time before everything will be in working order, but when it is once in work, and the returns come to hand, they will astonish the mining world.

### Whangamata District.

It is, perhaps, needless to point out that this district lies to the east and south of Tairua, and although not quite so rich, it is more general and widespread; the lodes are large, true, and defined, and trend for miles through the country, which is of a most congenial character for gold. Great attention is now being given to this district, and during the coming summer it must become one of our chief centres. Like Tairua, it is very easy of access, being handy to the sea coast.

### Waitekauri and Komata.

Are steadily advancing. In the former the Waitekauri Gold Company's mill is at last in full swing, and the returns, when they come to hand, must speak for the genuine character of the mine. The principal feature in connection with this property is the great magnitude of the lode, and its superior richness over other lodes; but it must be borne in mind that, although the ore proves to be worth over £5 per ton, that high average is not going to be sustained throughout; for instance, the greater number of stamps, the less attention will be devoted to the selection of the ore, and the whole lode will, no doubt, be passed through the mill.

There is nothing of importance to chronicle from the Komata, with the exception that the development work is being vigorously pushed on in the various mines.

### Waahi.

There is no change here. The Waahi Gold Mining Company

are in steady work, and the quantity and quality of ore coming to hand is much the same as heretofore. The Silverton Company are almost likely to get better results as their developing work proceeds. Some time ago I made guess of the general quality of the ore in this mine, and in one of my letters I thought £3 10s. to £4 would be a very high average, but since then I have had occasion to change my idea of the high average assays given out by the managers of the different companies. It would be much better for all concerned if the general assay value of the lode was given, and not of selected ores, as has been the rule; then a fair estimate of the value of ore would be arrived at.

### Karangahake.

The work of development in the Woolstock Crown and Taismen Companies is being assiduously prosecuted. In the Crown Mine the reef in the south section of the mine has again been picked after having to the westward a distance of 100 feet; here the ore body proves to be equally as rich. At this point it may be mentioned that the depth of this level from the mountain range is fully 1400 feet, and every foot of drivage accomplished in this direction is entering new and unexplored country, and at any time something of even greater importance may be revealed.

The Woodstock Company is steadily developing their lodes, and otherwise preparing for extensive raising of ore for treatment when their new mill is finished, which is rapidly approaching completion.

### Thames Proper.

#### (Thames Hauraki Gold Fields Company.)

The enlargement and stripping of this company's shaft is progressing rapidly, and from the commencement a total depth of 230 feet has been reached. During this week the No. 2 shaft in the south or Deep Sinker section of the company's property was started, and is now well in hand. This shaft when well advanced will penetrate a totally unexplored section of country, which I feel confident will prove to be a highly auriferous channel.

The Monatairai are pushing on with their developments, and from the general appearance and the activity displayed in opening up the various sections, there is every promise of something good in the near future.

The Tararu Mines Company are prosecuting works almost in every direction, and in addition to the ordinary battery treatment of the ores, it is fully anticipated that the cyaniding of the ores will be in operation during this month.

The Coromandel gold field is steadily advancing, but there is nothing new to chronicle beyond the developments in the Kapanga Company's ground. The gold met with at the 940 feet level will remain undeveloped pending the opening up of the levels, and the sinking of the main shaft down to the 1000 feet.

The Hauraki Gold Mining Company continue to win a high-grade ore, which promises to continue for some time to come; as a greater depth is reached the run of gold increases in length, and is quite consistent in value.

Scoty's Hauraki is steadily developing, and during the past week a crushing of a parcel of ore gave a return slightly under 1 ounce per ton (see returns).

The Kathleen, Preece's Proprietary, and other companies are pushing on with their shaft sinking, but there is nothing so far that calls for special mention.

The Kuaotunu field is also without change during the month. A very powerful firm purchased the Try Fluke Company's property for £50,000 cash, no shares (see returns for product). The property is a good one, but requires capital for its thorough development.

The Kapai Vermont Company, adjoining the Try Fluke, have also received an offer on the very same lines—cash offer, no shares (see returns)—which is the poorest return from this mine for some time.

Mr. J. Jenkins Cooper has secured the option of floating the Puru Consolidated Company's property. £1000 cash was paid, which goes into the ground for development. I consider Mr. Cooper has made one of the finest purchases of a mine on this peninsula. The mine comprises an area of 478 acres of highly auriferous land, quite undeveloped and wholly intact. Wherever opened up the lodes prove to be in size from 2 feet to 60 feet across, and all carrying a fair percentage of gold, some richer than others, but it is fully anticipated that they will prove remunerative if operated upon on a large scale. The mine is situated on hilly land rising to an eminence of 1000 feet above the sea with abundance of water, always sufficiently to drive 200 stamps if necessary; no sinking will be required, and the lodes are all now being opened up. One in particular, known as the Rimu reef, is a quartz body fully 3 to 6 feet in width, worth about £7 per ton. This has now been proved for a total distance of 200 feet, and at a depth of about 100 feet from its surface outcrop it is a specimen ore-bearing lode, and the mineral indications met with are of such a character that warrant the belief that rich specimens will be found at depth.

The Tapu district is steadily coming to the front, and during the week the Golden Point Company intersected a lode in their prospecting crosscut showing gold throughout.

The Royal Company have also cut a large reef, giving assay results up to £9 per ton.

To-day, July 10, a party of prospectors have come into town bringing ore with them, showing gold freely, which they discovered in a district known as the Omaha, situated between Thames proper and Ohinemuri, and about 4 miles east of the main county road. The ore which was brought to my office is of the argenticiferous class, but shows gold, and was broken out of a reef 6 feet in thickness, trending a north and south course. A rush has set in there.

Assays have since been made of the stone, and the results are phenomenal, being £80 per ton.

### Waitekauri Cross Company.

The extension of the crosscuts to intersect the Waitekauri Company's reef are steadily advancing in this mine, and now in the western level the same characteristic country as was met with by the Waitekauri Company, prior to meeting with the celebrated Golden Cross, is being penetrated; when this has been passed through, then the lode should not be far distant.

### General Matter.

It may be mentioned that the local municipal bodies who have the construction of roads into our gold fields deserve the highest possible praise for their untiring efforts in ministering to the requirements of the whole of our gold fields. Mr. Edwin Edwards, who has occupied the post of Chairman of the Ohinemuri County Council for two years, and six years as a Councillor, is well worthy of special mention for his efforts in urging forward roads and tracks to open up the most inaccessible centres. He is also a member of the firm of Morris and Edwards, the well-known legal mine managers, of which the Hon. Captain Morris, M.L.C., is the head. This firm, I may add, have the nursing of some of our most important mines. The Thames County Council, of which Mr. T. A. Dunlop is Chairman, are also executing a lot of useful work in opening up the gold fields, for without these local bodies the gold fields would now be at a standstill, for roads we must have to enable us to get our machinery into the mines.

### Gold Returns to July 15.

Waihi Gold Mining Company treated 2910 tons of ore for a yield of bullion valued at £11,221, or practically an average of £3 17s. 1d. per ton. During the period 82 stamps were in operation against 84 for the month previous; the value per ton extracted for that month was £3 9s. 9d. It will be seen that the return for this month shows a decided improvement.

Hauraki Company's return is very consistent and highly profitable; 350 tons of material were crushed for a yield of 2094 ounces 3 dwts. gold at £3 per ounce, total value £6282 9s., or at the rate of 6 ounces to the ton.

Waihi Silverton Company had a somewhat poor return, but it is fully anticipated that better results will be forthcoming. 900 tons of mixed material produced 649 ounces, valued at £1622.

Waitekauri Gold Company, in order to complete the month, had a three weeks' run; during that period they treated 117 tons for a yield of bullion valued at £64, or at the average rate of £5 13s. 6d. per ton. Heavy floods during the past week dislodged the water race, which will necessitate a further delay of about one month.

Taranaki Creek Company treated a parcel of ore for a yield of 108 ounces of gold at 65s. per ounce, total value £347 5s. 3d.

### Gold Returns and Late News.

Mr. J. A. Pond, the New Zealand representative of the last mentioned company, showed me a box of galena ore thickly associated with bunchy gold of high value, broken from the large reef in the intermediate level, Norfolk section of the mine. Without exception the ore is of immense richness, and if it should continue, which there is every reason to suppose that it will, the prospects of the mine should be considerably enhanced in value.

### Waratah Gold Mining Company.

This old gold-producer is again to the fore with a profitable return; 191 tons of general material gave a return of 226 ounces 16 dwts. of gold; total value, £618 5s. 6d.

This company is paying another 2s. 6d. dividend per scrip share, and has kept this up for many years.

Caledonian-Kuruni Company, operating on a small scale at present, crushed 38 loads of ore, which produced 65 ounces of gold, valued at £179 11s. 8d.

Occidental crushed 14 loads and 9 lbs. picked ore, for the satisfactory yield of 32 ounces 10 dwts., valued at £84.

Victoria Company treated 98 loads for a gold yield of 199 ounces 3 dwts., valued at £2 16s. 6d. per ounce; total value, £359 8s. 4d.

### Gold Returns.

Sceptre Claim (Wharekeranpung district) treated 1 ton of ore from a 40-foot face of a large reef for an extraction of gold, valued at £17 per ton. This district is likely to make a name for itself ere long. It lies to the north-east of the Waitakauri.

Kapai Vermont Company (Kuaotunu) crushed 308 tons for a yield of 254 ounces of gold, valued at about £680.

Scoty's Hauraki treated 40 tons for a yield of 39 ounces of gold, total value £117.

Try Fluke (Kuaotunu).—Cyanide 25 ounces 5 dwts., battery 85 ounces 10 dwts., total 110 ounces 15 dwts. (The tonnage of ore is not given.)

### Monatairai Gold Company.

For the past month 550 tons of general material were treated for the ordinary yield of 132 ounces 15 dwts. gold, total value £335 2s. 1d.

It is the intention of this company to erect extensive crushing plant, and endeavour to treat their large low grade lodes on a gigantic scale. This system is a very wise one to adopt, and, with the continuous turn over, there is every chance of rich runs being met with.

## MINING NOTES FROM BRITISH COLUMBIA.

(FROM OUR OWN CORRESPONDENT.)

THE Byron N. White Company, which owns the Slocan Star Mine, has declared a dividend of \$100,000. This makes \$250,000 paid in the last 12 months, a sum equal to 50 per cent. on its capital, which is \$500,000, in one million shares of 50 cents. each, but there are none on the market. A very large amount of ore has been shipped from this mine, and this is still going out. The ore body has been well opened up by four tunnels at different elevations in the mountain side, and another is now being run. The company owns seven claims besides the Slocan Star.

THE Le Roi at Rossland has declared a dividend of \$250,000, bringing the total paid by this company in a little over a year to \$200,000. Difficulties of shipment have hitherto tended to keep down the dividends, but now that the railway to Trail on the Columbia River is in working order this obstacle to progress will be removed. The Red Mountain Railway, which comes into Rossland from Northport in Washington, is being rapidly pushed ahead, and will be finished during the autumn. It connects all the principal mines at Rossland with Spokane, and the railway systems of the United States.

THE Hill Mines (Limited) have decided to enlarge their smelter plant at Nelson, and have ordered a larger blast furnace capable of handling 170 tons of ore a day, a reverberatory furnace, a calcining furnace, and the necessary boilers and blowers. The order has been placed with the Western Iron Works of Butte, Montana.

A SURVEY is also being made for an additional tramway line between the mine and the smelter, as the present one will hardly be able to transport sufficient ore to keep the new plant going. The new tramway will probably be run on the double rope system.

The mining revival which is now taking place in British Columbia will, no doubt, be considerably assisted by the provision of extra railway communication, which is understood to have been planned out by several leaders of the industry in the province. There is said to be a scheme afloat in London for joining Boundary and Trail by a railway, which will serve the important end of enabling the Canadian ores to be carried to, and treated by, Canadian smelters, instead of being sent over the border into the United States. There are said to be quite a large number of British Columbian companies shortly to be floated on the London market.

THE OIL COMBINATION.—A full private meeting was held in Glasgow this week of representatives of the Scotch oil trade, to consider the cutting of the American oil companies, who are selling burning oil in Scotland and on the Continent under the fixed price of the Scotch companies. After a long discussion, the meeting, which lasted two hours, decided not to lower the price of Scotch product at all, although all the Scotch companies are still standing by the association. It is thought that this decision may lead to a breaking away of some of the small concerns in order to secure a free hand to sell their oils and compete with the American product.

## THE NEWTON-CHAMBERS SYSTEM OF SAVING BY-PRODUCTS OF COKE MANUFACTURE IN BEE-HIVE OVENS.\*

By MR. ROBERT A. COOK, New Brunswick, America.

**I**N the increasing struggle to cheapen the cost of our iron and steel products a great deal of attention has been given to economies in the manufacture of coke; and while but little has been accomplished in this direction in the United States, the narrow margin between cost and market price which has obtained here for the past few years of continuing manufacturing depression has brought the coke maker face to face with the problem, how to save, and benefit by them, the hitherto waste products of distillation.

These may be summed up under three heads, generally ranking in value in the following order:—1. Ammonia salts.—2. Oil or tar products.—3. Gas. There are cases in which the last may assume the position of greatest importance.

The object of this paper is to bring prominently before our coke experts a brief history of the development at Sheffield, England, of a most successful system of the utilisation of by-products in connection with an already existing plant of bee-hive ovens. This system has now been satisfactory operation for five years and is applied to a series of blocks of ovens, comprising about 100 in all.

At this plant, belonging to the well-known firm of Newton, Chambers, and Co. (Limited), Thorncroft Collieries, Sheffield, the gas from the ovens is utilised for generating all the steam used about the works, and the oil and ammonia are recovered. One great advantage is that if any hitch should occur in the by-product plant, the ovens can be operated in the usual way, and not the slightest delay or irregularity need occur in the manufacture affecting the quantity or quality of the coke produced. In fact, the saving of the waste product is purely an adjunct to the operations of the coke plant.

The Thorncroft plant consists of ordinary Yorkshire bee-hive ovens, 11 feet in diameter by 8½ feet high. They are more carefully built than is usually the practice in this country, the fire brick being backed in 4 inch course of red brick, and the spaces between the ovens being concreted instead of rammed with clay. The ovens are thus more likely to be gas and air tight, and have probably twice as long a life.

The following are the attachments constituting the system:—

1. A fire-clay pipe is built into the crown of the oven, passing completely around the dome, close to the inner lining and near the spring of the arch. One end passes to the outside of the oven, where it connects with an iron blast pipe or main; the other end, entering the oven above the charge, furnishes a supply of air required for the coking operation.

2. An opening left in the bottom or floor of the oven, near the door, communicating with a cast iron hydraulic main for cooling purposes, serves to take off the liquid and gaseous products of distillation. To the hydraulic main is attached an oil drip, which separates the heavier liquids, and the gas passes on through the surface condensers, consisting of light cast iron pipes, set close to each oven. In these condensers the further separation of oil and liquor from the gas takes place, and everything passes thence to a 24 inch main leading to the settling tank.

3. The gas passes on from the upper portion of this tank to the boiler house, where it heats eight large Lancashire boilers, and is conveyed thence to a stack 150 feet high.

Before the introduction of this gas for fuel, the weekly consumption of coal under these boilers was 200 gross tons. This has been entirely done away with, and as the gas is the waste product of ovens using 1000 tons of coal per week, the saving is equivalent to 20 per cent. of the coal coked. These boilers have been running steadily without the intervention of a gas holder, or other pressure regulator since the attachment was first made.

4. An elaborate system of tanks and stills has been developed at Thorncroft for the complete separation of the various oil products. After taking off the last traces of ammonia liquor, these oils are found to give several grades of high solvent naphtha, burning fluid, heavy oil (used for lubricating), some hitherto unknown phenols, and finally, a low percentage of very fine pitch. Carbolic acid has not been found, showing a complete variance in the process from that of the retort system. The great value of the new phenols for medical and antiseptic purposes has rapidly developed, in that respect, a large and important business.

On a test of nine months the by-products recovered were, in addition to the gas, 5½ lbs. of ammonium sulphate and 9 gallons of crude oil per ton of coal.

The whole plant is of the simplest design, the result of many years of experimentation, and within the comprehension of the ordinary labourers usually employed about coke works. The coke cannot be distinguished either in appearance or in practical use from that made in bee-hive ovens in the ordinary way. In burning under this system, the doors are kept closed and luted, only air enough being admitted for the combustion of an amount of gas sufficient for the coking, thus leaving the coke quite free from any ash; and, on opening the ovens, the charge is found at the same height in front as behind. The yield has been very close to the amount of fixed carbon plus ash, or 70 per cent. in a coal containing about 30 per cent. of volatile matter.

\* A paper read before the American Institute of Mining Engineers.

## TIN TICKETING.

THE fortnightly ticketing for tin ores was held at Tabb's Hotel, Redruth, on Tuesday. Results:—

### VALUES OF ORES SOLD BY EACH MINE.

Mines	Tons cwt.	Per ton.	Value.
Dolcoath No. 1	14 0	36 12 6	512 15 0
do No. 1a	14 0	36 7 6	509 5 0
do No. 1b	12 0	36 15 0	441 0 0
Wheal Grenville a	18 0	37 17 6	681 15 0
do b	13 0	37 15 0	490 15 0
Carn Brea and Tincroft a	14 0	34 12 6	484 15 0
Mines (Limited) a	14 0	34 15 0	486 10 0
do No. 2	1 0	21 15 0	21 15 0
do No. 3	1 10	14 0 0	21 0 0
Basset (Limited) No. 1	20 0	38 10 0	775 0 0
do No. 2	3 10	26 12 6	93 3 9
West Kitty	13 0	38 12 6	502 2 6
East Pool a	6 0	26 7 6	185 5 0
do b	6 0	25 15 0	154 10 0
do No. 2	1 0	11 5 0	11 5 0
Phoenix United	11 0	37 2 6	498 7 6
do No. 2	1 10	30 5 0	45 7 6
Levant	10 0	39 12 6	396 5 0
Killifret	9 0	36 0 0	324 0 0
Wheal Kitty	8 0	38 10 0	308 0 0
South Condurrow	5 0	38 17 6	194 7 6
	195 10	£7020 3 9	

AVERAGE PRICE PER TON, £35 18s. 2d.

AVERAGE PRICES PER TON.

July 14.....£36 13 6 | August 11.....£36 4 9

July 28.....5 1 | August 25.....35 18 2

### VALUES OF ORES PURCHASED BY EACH FIRM.

Firms	Tons.	£ s. d.
Cavedras	40 5-6	1509 7 11
Chyndour	49½	1805 8 9
Williams	36 5-6	1289 17 6
Redruth	22 1-6	763 15 0
Empoll	4½	169 15 0
Fornish	41½	1481 19 7
	195½	£7020 3 9

## PROVINCIAL SHARE MARKETS.

### THE CORNISH MINE SHARE MARKET.

MR. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices, Liskeard, Cornwall, writes (August 27):—The mining share market continues dull, with a general depression; on the further decline of the tin standard for cash and forward delivery, quotations mostly nominal. Quotations:—Basset United (Limited), 16s. to 17s.; ditto (5s. partly paid), 4s. to 4s. 6d.; Blue Hills, 1s. to 1s. 6d.; Carn Brea United (Limited), 1s. 6d. to 2s.; Devon Consols, 17s. 6d. to 18s. 6d.; Dolcoath (Limited), 18s. to 19s.; ditto (7s. 6d. paid), 5s. 6d. to 6s.; East Pool, 1½ to 2½; Killifret (Limited), 1s. 6d. to 2s.; Levant, 3½ to 3½; Polberro, 6s. to 7s. 6d.; South Condurrow, 6s. to 7s.; West Kitty, 2 to 2½; Wheal Grenville, 6 to 6½; Wheal Kitty, 5s. to 6s.; Wheal Metal, 3s. 6d. to 4s.

Messrs. ABBOTT and WICKETT, Stock and Share Brokers and Mining Share Dealers, Redruth, write under date of August 27:—A very dull market all the week, and little or nothing doing in shares. Dolcoath are about 19s. and 6s. 3d., with but little disposition to deal. Quotations herewith:—Blue Hills, 1s. to 2s.; Basset Mines, ½ to ½; Dolcoath (fully paid), 19s. to 20s.; ditto (7s. 6d. paid), 6s. to 7s.; East Pool, 1½ to 2; Killifret, ½ to ½; Polberro, ½ to ½; West Kitty, 2½ to 2½; Wheal Grenville, 6 to 6½; Wheal Kitty, ½ to ½; Wheal Metal (3s. paid), 3s. 6d. to 4s.

### MANCHESTER.

Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market-street, write August 27 (noon):—Foremost markets (excepting Americans) have improved more or less during the past week. Home rails show some irregularity, but the balance of alterations, both numerically and in amounts, is on the upward side. Americans are again lower all round. There have been short periods where fractional improvements have been recorded, but these have again speedily given place to fresh declines, leaving the record for the week one of unbroken declines. Canadians have moved very similarly to Americans, but the depreciation herein amounts to a little as a whole, although the First and Second Preferences quote 1 each down. Consols quote unchanged. The few changes in Colonial stocks and debentures are all on the upward side. Corporation stocks, &c., are all higher where altered, ranging from ½ in Stockport Three per Cent. to 3 in Blackburn Three and a Half per Cent. In foreigners, Mexican Six per Cent. are put ½ lower, but this is the only instance of decline, whilst Brazilian Four per Cent. and Turkish D are 1 each, and several others fractionally higher. Changes in the several sections of the miscellaneous market are of no great moment in any department, and scarcely so in any individual case; at any rate, nothing that may not be gathered from the details herein given below.

ENGLISH RAILS.—Higher: Great Westerns, 1; Lancashire and Yorkshire, 1½; London and North-Western, 1; Sheffield A, ½; Districts, ¾; North British, ½; Dover A, ½.—Lower: Caledonians, ½ to 1; Great Eastern, ½; Brighton A, ½ to ½; Midland, ½.

CANADIANS AND AMERICANS.—Lower: Atchisons, ½ to ½; Atchisons Preference, ½; Canadian Pacifics, ½; Trunk Ordinary, ½ to 3½; Trunk Guaranteed, ½; Trunk First Preference, 1; Trunk Second Preference, 1; Trunk Third Preference, ½; Central Pacifics, ½; Milwaukee, 1½; Denver Ordinary, ½; Denver Preference, 1½; Louisville, 1½; Missouri, ½; New York Central, ½ to ½; Erie, ½; Ontario, ½; Norfolk Preference, ½ to ½; Readings, ½; Union Pacifics, ½ to ½.

CONSOLS.—Unchanged.

COLONIAL STOCKS, &c.—Higher: Cape of Good Hope Registered, 1; New South Wales Inscripted, 1; Victoria Inscripted, ½.

CORPORATION STOCKS AND DEBENTURES.—Higher: Blackburn Three and a Half per Cent., 3; Bristol Three and a Half per Cent., 1; Manchester Four per Cent., ½ to 1; Stockport Three per Cent., ½.

FOREIGNERS.—Higher: Argentine Six per Cent., ½; Brazilian Four per Cent., 1; Egyptian Unified, ½; Italian Rentes, ½; Portuguese Three per Cent., ½; Russian Four per Cent., ½; Turks "D," 1.—Lower: Mexican Six per Cent., ½.

BANKS.—Higher: Imperial Ottoman Bank, ½ to ½; National Provincial, ½; Union of Manchester, ½.—Lower: Bank of Liverpool, ½ to ½.

INSURANCE.—Higher: Liverpool, London, and Globe, ½; Reliance Marine, 1½.—Lower: London and Lancashire, 1½; Sea, ½; Thames and Mersey, ½ to ½.

COAL, IRON, &c.—Higher: Bolckow Vaughan (£20 paid), ½; ditto (£12 paid), ½ to ½; John Brown's, ½; Ebbs Vale, 1½ to ½; Sheepbridge A, ½.—Lower: Cammells, ½; Tredegar A, ½.

TELEGRAPHS AND TELEPHONES.—Unchanged.

BREWERIES.—Higher: Bents, ½; Masseys, ½; Showell's, ½.—Lower: Allsops, ½; Threlfalls, 2.

MISCELLANEOUS.—Higher: Armitage, ½; Barlow and Jones, ½ to ½; Bowman Thompson, ½; Brooke Bond, ½ to ½; Canard Stenn, ½; Henry, ½; Ship Canal Preference, 1½; Sez Canal, 1; Manchester Carriage A, ½; ditto, B, ½; ditto, C, ½.—Lower: Blackpool Towers, 6d.; Brunnen Mond, ½ to ½; Coats, ½; Fowler Brothers, ½; Lister, ½; Salt Union, 3½; United Alkali, 3½; Railway Debenture Trust, ½.

LATER, 4.0 p.m.—Home rails are generally easier to-day, the disturbing cause being ostensibly caused by trouble in Constantinople. Anyhow, prices have given way, ranging from ½ to 1 per cent. Americans have fluctuated to-day. They opened fairly firm, gave way somewhat, and hardened up again later down to the close. Canadians have much the same record as Americans. In other departments nothing much to notice, save the dividend on Bolckow Vaughan and Co. shares. This, however, had been generally anticipated, and did not affect the prices of their own shares or those of their class.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironbroker (August 27), writes:—During the past week there has not been much business doing, owing to the holiday season and the intervening fortnightly settlement. Prices, however, are generally higher, owing to the better appearance of matters in South Africa.

In shares of coal, iron, and steel companies prices do not show much alteration. Steel Company of Scotland shares advanced to 5½, on the issue of the balance-sheet showing £45,656 profit, which enables the debit balance to be wiped off, and £5821 carried forward. Marbella have recovered to 26s. 9d.; Niddrie, 38s. 9d.; and Stewart and Clydesdale 13½.

In shares of copper concerns there is very little business doing, and prices are generally easier. Arizona have declined to 53s.; Tinto to 22½; and Tharsis to 11s.

In shares of gold and silver mines there has been a considerable increase in the amount of business done. The better class of Kaffir mines continue to be bought for investment. The ending of the rebellion in Rhodesia has directed considerable attention to shares in companies having an interest in that country. Chartered rose to 71s. 9d., and a large business has been done in Rhodesia Exploring, Rhodesia (Limited), United Rhodesia and Willoughby's, Consolidated Gold Fields advanced to 13 13½-16, East Rand to 8½, and Randfontein 65s., but are all easier. West Australian Joint Stock Trust fully paid offered. Afrikander are at 37s. 6d.; African Estate, 40s. 6d.; Aladdin's Lamp, 58s. 9d.; Associated (W.A.), 70s.; Bendigo Gold Fields, 9s.; Broken Hill, 50s.; Bayliss's No. 2 South, 9s. 9d.; Block B, 41s. 3d.; Bios Spar, 10s. 9d.; Barrett's, 16s. 8d.; Central de Kaap, 9d.; Charterland, 16s. 3d.; Consolidated Murdoch, 13s. 6d.; Cripple Creek Consolidated, 12s. 6d.; Caratal, 6d.; Croydon Console, 5s. 9d.; Cassel, 15s. 6d.; Chaffers, 6s. 9d.; East Orion, 4s. 6d.; East Sheba Reef, 2s. 6d.; Emma, 1s. 9d.; Gem of Cue, 2s. 6d.; Griersons, 9d.; Ginsberg, 45s.; Hannan's Napier, 16s.; Henry Nourse, 7½; Heidelberg, 3s.; Hit or Miss, 47s. 6d.; Haoraki, 18s. 6d.; Hainault, 55s.; Hannan's Golden Pike, 3s. 9d. prem.; Irene Haoraki, 1s. 6d.;

4s. 9d.; Klerkedorp, 16s. 6d.; Langlaagte United, 21s. 31s.; Langlaagte Star, 33s. 9d.; Lisbon, 7s. 9d.; London and Paris, 24s. 6d.; Leichdale Rhodesian, 15s.; Lake View Extended, 27s. 6d.; Modderfontein B, 43s. 9d.; Murchison Reefs, 2s. 6d.; Mosman, 3s.; Moon Charlotte, 35s.; Mashonaland Agency, 50s.; New Steyn Estate, 33s. 9d.; North Boulder, 36s. 3d.; Orion, 29s.; Paarl Central, 30s.; Primrose, 6s.; Porges Randfontein, 33s. 9d.; Phoenix, 1s. 6d.; Rhodesian Mining and Finance, 22s.; Sheba, 42s. 6d.; Sunburst, 2s.; Spec Bona, 35s.; Scottish Colonial, 15s.; Silati, 8s. 9d.; Southern Land, 8s. 9d.; Taipatu Estate, 73s. 9d.; Tree Blue, 20s.; Violet, 21s.; Woodstock Transvaal, 21s. 9d.; and Westleigh 8s. 6d.

In shares of miscellaneous companies prices are generally lower; Lawes' Chemical Company announces dividend of 5 per cent. 01 companies' shares are very flat on the reduction in price of burning oil, and low prices of their other products. Broxburn are at 8s. 6d.; Pumperston 5s; and Young's 26s. 6d. Glenboig Fire Clay are at 8s. 6d.; Nobel's Explosives 18s. Roburite Explosives (Preference) 4s; and Salt Union (Preference) 9s.

### EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, Hanover-street, Edinburgh, report as follows under date of August 27:—The dividends announced this week on the Glasgow and South Western and Great North of Scotland Railways Ordinary stocks, although showing in each case an improvement on last year, have had no appreciable effect on prices. The traffic returns continue very satisfactory, those of the Caledonian now including, it is understood, the receipts from the underground line lately opened. Any upward tendency in the leading Scotch stocks has, however, been held in check by the reappearance of labour disputes in the engineering trade. The new issue of Caledonian Ordinary has commanded a premium varying from 9 to 10½ per cent, over the price of issue. In insurance shares, North British and Mercantile, Royal, and Scottish Union A are lower since last weekly report. Standard Life has risen from 55 to 55½; Scottish Imperial from 36s. 6d. to 37s. In banks, British Linen is down 10s

as one should do in all fairness, our leading mines have a history of which they need not be ashamed. As a whole, Cornish tin mines have been more profitable in proportion to the expenditure upon them than foreign or colonial gold mines; and if they can secure a fair proportion of subscribed capital in the future, I am persuaded they will fully maintain their old reputation. Let investors make the experiment of dividing their interests; let them subscribe even a little to the capital issues of each of our Cornish tin mines, or buy at this most favourable time and hold a few shares, and there will ere long be such a revival of home mining as will gladden all patriotic hearts. As I have already said, I believe we shall have a better price for tin before long. Certainly we have had very bad times in Cornwall for the past two or three years; but we have run through troubled waters before, and I believe we shall now if we do not lose heart. The life of the world is long, and ups and downs are sure to occur in connection with an industry like tin mining. But we must not lose heart. We must remember that the competition which is now pressing so heavily on Cornwall is from alluvial tin—that is, from tin obtained by washing surface gravels; and the real competition is from the Straits region only, which is now yielding at the rate of 50,000 or 60,000 tons per annum. At such a rate of production, many miles of valley must be cleared every year; and I doubt very much if such supplies can be kept up for long. I recall the alarming prophecies that have been made about supplies from Australia, the United States, Mexico, Peru, and South Africa. Depend upon it, none of these countries can seriously hurt us. We need not fear the competition even of alluvial tin except from a wet country, such as the Malay Peninsula, and in my judgment, when once the surface gravels are exhausted, we need not fear competition in tin mining proper from any part of the world. This present depression has been long and deep, but there are many indications that it will disappear. It has long been observed that metals rise and fall more or less together. Copper, notwithstanding a slight check, has advanced nearly 25 per cent. above the average price of the last few years, and there is every reason to believe that it will go higher still. Why should not tin do the same? I am one of those who believe that it will, and that before very long, particularly if silver, which is here one of the controlling factors, should also rise only a few pence per ounce, as seems almost certain to happen. With a better price for tin there must spring up a keen demand for tin shares, but now is the time to acquire them cheaply. Gentlemen, our company came out as "a pure speculation, but a good one," and it is that still. Hitherto, we have had to go dead slow, on account of our limited means, but we have kept going. I now appeal to our shareholders and to the public generally, to provide a few thousands requisite to enable us to pursue a more vigorous policy, which, in my judgment—although, of course, no one can look through the ground—offers a reasonable prospect of a real and even of a brilliant success. I now move the adoption of the report and accounts, and invite remarks hereon from any of the shareholders present.

Mr. G. W. DIXON seconded the resolution, and it was carried unanimously.

Mr. ROSS moved the re-election of the auditor, Mr. W. H. Thompson, at a fee of 30 guineas.

Mr. WHYTT seconded the motion, which was agreed to.

Mr. WHYTT asked whether he was correct in understanding that the shares to be offered were of the nominal value of 5s., but would be credited with 2s. 6d. paid.

The CHAIRMAN said the present shareholders had the right, so long as any of the 880 shares were left, to apply for the 5s. shares, and only pay 2s. 6d. for them. After that meeting a circular would be sent out to all the shareholders explaining the position.

Replying to a series of questions asked by Mr. DIXON, the CHAIRMAN said he last visited the property three weeks ago. The Wheal Fortune and Wheal Metal were adjoining mines, and in consequence, if the occasion required it, men working on one mine could be also employed at the other without any loss of time. There was no necessity for pumping water out at Wheal Fortune, but the water from Wheal Metal went on to that property. On Wheal Fortune they had been quarrying more extensively than they had been doing previously. They had just erected a nice little crushing plant, consisting of a 6 horse-power petroleum engine, a rather powerful stone breaker with elevator and a set of jigs, which they found dealt with the stuff very well. Hitherto very little work had been done, because they had been almost dried out, but with the extra plant he anticipated a considerable increase in the returns. It was all low grade ore in Wheal Fortune, and also in Wheal Metal, but in the latter they knew the lode was very rich in places, and they hoped to find these portions as the work progressed. Wheal Metal was 300 fathoms south of the old Wheal Vor Mine, but nothing like the same depth had been obtained in the former as was reached in the latter. The western portion was now only 200 feet down from the surface. When they had come across rich ground in the eastern portion they found they were in old workings, and that was the reason for his recommending the development of the ground on the west of the shaft. The 1200 feet of pipe line laid from Wheal Metal was for the purpose of getting a more convenient flow, but the quantity of water had since been very small.

On the motion of Mr. WHYTT, a vote of thanks was accorded to the Chairman, and the meeting then concluded.

### HALKYN MINES DRAINAGE COMPANY.

The half-yearly meeting of the Halkyn District Mines Drainage Company was held at the company's offices, Chester, on Wednesday, Mr. JOHN THOMPSON presiding in the absence of the Chairman, the Duke of Westminster. The directors submitted the following report:

"The directors beg to present the accounts for the half-year ended June 30, and to submit the following scheme for disposal of the revenue available:—

The unappropriated balance shown by the report of

February 26, after payment of dividend, was £3779 15 9

Out of which was paid directors' remuneration 106 0 0

Leaving ... 3674 15 9

The profit for the half-year, as per annexed account, is 6175 6 0

Making available ... 9850 1 9

And the directors suggest that the whole of the balance of law charges in connection with the Poor Rate Appeal be written off now, instead of by instalments as proposed in August, 1895; this will absorb £1041 9 0

And that the overpaid capital be met by a transfer from revenue account of 1699 8 2

2740 17 2

That a dividend at the rate of 15 per cent. per annum be now declared, absorbing 5457 15 0

And a bonus at the rate of 1½ per cent. be paid amounting to 309 12 6

6367 7 6

Leaving to be carried forward... £741 17 1.

It will be observed that shareholders holding bonds to the amount of £1800 (in accordance with the suggestion of the board) accepted repayment in March last, so that there is now only £1700 remaining; and provision has been made for the repayment of this sum in March 1897, in accordance with the terms of the loan. The weight of lead sold during the half year was 5245 tons, against 3726 tons in the previous half-year; and of blende 1032 tons, against 824 tons; the average price being £7 7s. 3d. for lead, against £7 6s. 10d.; and for blende £8 18s. 11d., against £9 11s. 10d. The expenditure on maintenance has continued to be but small, though the whole of

the levels, shafts, &c., have been kept in excellent condition. The directors regret to have to record the death of their colleague, Mr. Robert Frost, who was a director from an early period of the company's formation."

The half-yearly report of the manager, Captain Williams, stated that the North Hendre Mine never looked better, and a most satisfactory increase had been made in the returns since the new dressing machinery had been in working order. The East Halkyn Mine was also looking very well. The South Halkyn and Rhymwyn Company were sinking their new shaft to prove the Hendre lode on their land, and fair progress was being made with the work. The Mool-y-Crio Company (Goddard's Mine) were still going on with the work of sinking their shaft, and the Pen-y-Bryn Halkyn Company were still making several trials on their property, some of which looked promising, but so far nothing of importance had been discovered. The returns from the Halkyn Mine showed an increase of 72½ tons of lead ore over the previous half-year, and those from the Rhossemor Mine a decrease of 60 tons. The quantity of lead ore sold from the mines in the company's area was as follows:—

	Tons.	cwts.	qrs.
Halkyn Mine	2302	5	3
Rhossemor Mine	120	0	0
East Halkyn Mine	600	0	0
North Hendre Mine	2223	5	0
Total	5245	10	3

This was an increase over the previous half-year of 1818 tons 15 cwts. 1 qr.

The weight of blende ore sold was as follows:—

	Tons.	cwts.	qrs.
Halkyn Mine	502	10	0
East Halkyn Mine	430	0	0
North Hendre Mine	100	0	0
Total	1032	10	0

This was an increase over the previous half-year of 508 tons 5 cwts.

The CHAIRMAN, in moving the adoption of the directors' report, alluded to the satisfactory condition of the undertaking, and the prosperous state of the finances.

The resolution was carried, and a dividend at the rate recommended in the report was subsequently declared.

### WEST AUSTRALIAN GOLD CONCESSIONS, LIMITED.

The ordinary general meeting of the shareholders in the West Australian Gold Concessions (Limited) was held at Winchester House, E.C., on Thursday, under the presidency of Mr. E. W. OPPERT.

The SECRETARY (Mr. Wm. Davison) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—The directors have very much pleasure in meeting the shareholders, and they would probably have met you before but for the fact, well known to you, that the properties which we hold, and in respect of which we are to receive accounts, are many thousands of miles away from here. At the same time, although this meeting ought to have been called earlier, I may remind you that during the short working existence of the company of two years this is the third meeting we have held, and four cash dividends had been paid. In the first instance you have received our report, which would have been sent to you earlier but for the absence of the auditor from London. The balance-sheet, I think you will agree with me, is not an unsatisfactory one. The company was intended to be kept as a private concern, and was registered as such, but gradually our list of shareholders swelled from somewhere about 15 to, I think, 730. Taking first the credit side of the balance-sheet, you have, besides the original payment for the concessions, an item of £65,424, which represents shares in various companies. The value of these shares was ascertained by certificate from an eminent member of the Stock Exchange, who supplied us with the value so far as he possibly could. The item of £28,328 5s., which appears again on the other side of the balance-sheet represents shares which had not then been transferred to the real owners, who were mostly vendors, in Australia. The items of investments and shares at par, £3642 12s. represents certain stocks which we then held, and the greater part of which have since been sold at a handsome profit. The expenditure on mining claims speaks for itself. It refers to various properties which we were then working, and represents partly purchase price and partly money spent in development. As to the sundry debtors, £4394, one of these represents the Talisman Company, which I hope, and I believe I may say is one of the best properties we hold, and whose able Chairman I am glad to see amongst us. This represented an amount of cash not then due, but which has since been satisfied. Proceeding to the other side, you will see that we then had a share capital of £53,655—shares issued—on which at that time £582 were due for calls, but the whole of which, I think, with the exception of £20, has since been paid. The item of sundry creditors is an ordinary business item, and the item of £28,328 I have already dealt with. This leaves a balance of profit for the period ending December 31, 1896, amounting to £53,043 13s. 9d., of which already dividends to the amount of £7177 7s. 11d. have been paid. As regards the profit and loss account, I think you, gentlemen, will agree with me that the board have kept the expenses down to the very lowest extent, compatible with efficiency. The whole of our expenditure in Australia, including the important item of travelling expenses, amounted to £2113 5s. 10d., and the London expenses, including the directors' fees for about 18 months (£661 13s. 4d.), amount to £2469 9s. 11d., altogether about 10 per cent. of the profit which the directors have succeeded in realising for you. I wish to say a few words now with regard to some of our properties. In the Princess Royal, which we already possessed at the end of last year, I think we have one of the best properties in the Cue Murchison district. When I last met you we had been informed that it was one of the best developed properties in the Cue district. We were not then aware that there were 4000 tons of ore in sight, but, as a matter of fact, a telegraphic report, which we received some six weeks ago, shows that that 4000 tons has swollen to 10,000, of which 8000 are high class ore. The value of the ore has been confirmed since that telegram was received by a further message that 70 tons had been crushed, yielding about 1 ounce 19½ dwt. per ton, besides 8 dwt. from tailings, making nearly 2½ ounces to the ton. The gold from the Princess Royal is, I am told, about the finest gold you can get in Western Australia, and it has been sold to the bank at £4, and I think, in one instance, £4 1s. per ounce. The Princess we are developing as fast as we can, and we believe that the Princess Royal reef dips into it at no very great depth. Of the Talisman I have already said a few words. As you are very large shareholders in that concern, I may tell you that I, personally, have bought every share I have been able to get. A telegram that we have received lately points to the commencement of crushing on the 10th of September, and our representative does not content himself with telling us this very important fact, but he says in his message, "You may expect most excellent results." Seeing that the assays, not of small samples, but of considerable quantities, at our trial crushings, have given results which far exceed our most sanguine expectations, I think we may say that we have a most valuable asset in the 20,000 or 25,000 shares we have in the Talisman. As regards the Prince's Point, I had hoped that our consulting engineer, who has just returned from New Zealand, would have been present, but, unfortunately, he is in Cornwall, recruiting after an illness. But before he left he told our secretary that we need have no fear about the Prince's, for that in a few weeks time we shall get some very valuable leaders as soon as pumping machinery is up. Since then we have received a telegram that the pumping machinery will be completed and at work at the end of next week. So much as to the properties which

we held at the end of last year. Now I wish to say something about some properties which we have acquired since then, as to which you will no doubt be glad to receive information. I think about the most impartial information I can give you is that which appears in some of the best Western Australian papers. Harking back for a moment to the Princess Royal, the *Murchison Times* says with regard to that property:—"For a fine body of stone there is no mine in the vicinity of Cue to beat the Princess Royal. That one has only to see to acknowledge. For nearly 500 feet the reef is distinguishable, varying in thickness from 10 inches to 6 feet. Throughout this district it has not pinched out once." Now as regards the Talisman East, which immediately adjoins the Talisman on its eastern boundary, we have received a telegram to the effect that the lode at the bottom of the shaft which, according to previous reports, was only 6 feet wide, has now widened to 14 feet 6 inches, and the average assay of the lode yields 1 ounce to the ton. Adjoining that property, to the south, both of the Talisman East and the Talisman, is another property, called the Meteor. This was originally called the Talisman Extended, and like many good mines, the original owners had to abandon it for want of funds. We immediately acquired it and the result of our work, which has now been going on for 12 months, certainly has not disappointed us, for the No. 1 reef of the Talisman, which is one of the best reefs in that mine, has been proved to run through a portion of the Meteor, and we think it will run through the whole of it. There are already three shafts down on the Meteor. The deepest was then 80 feet, and is now about 100 feet. There are three reefs on the property altogether, the average width of which at the present depth is 4 feet 6 inches, all of them showing very good gold. The latest telegram informs us that the stopes are looking exceedingly well. But a property not very far from this, also in the Black Flag district, to which we attach very great hopes for the future, is a property called the Ajax, with an area of 48 acres. This might almost be said to be a parent company, on account of the size of the property, and it has been so acquired that the 48 acres really cover reefs from one end of the property to the other. The *Golden Age* of Western Australia says:—"On the south block a shaft is sunk to a depth of 75 feet, at which point water has been struck. From this level a crosscut has been driven for 20 feet from the shaft, which has cut the reef, which here measures 2 feet 6 inches in width, and carries stone which pays handsomely for dollying, and which yields an average"—we hope it will yield such an average—"of 10 ounces to the ton by panning. A parallel reef also intersects this block, averaging 2 feet in width, which has been sunk upon to a depth of 20 feet, and averages by assay 3 ounces to the ton. On the north block both reefs are distinctly traceable." So far I have only dealt with the new properties in the Black Flag district. Another property in which we have also an interest is the Golden Dyke in the Coolgardie district. Active development has been going on in that property for a very considerable time past, and we are working on three or four reefs which are in close proximity, easterly to the township of Coolgardie. We have had some of the ore assayed, and it yields an average of 5 ounces 12 dwt. to the ton. A telegram received about a fortnight ago tells us that ore has been struck in another part of the mine at a depth of 66 feet from No. 1 shaft. A further telegram tells us a rich strike has been made at No. 2 shaft; the gold is coarse, but our manager proceeds to tell us that the assay of the ore yields 5 ounces 12 dwt. to the ton. In an easterly direction from the Golden Dyke we have the Brownhill Great Master, through which we are informed the Brownhill lode runs. It is almost north of the Hannan's Brownhill, and is a property which, I am happy to say, I have been the means of giving to this company a very large interest in on bedrock terms. This property immediately adjoins Hannan's Brownhill, and we are informed that the Brownhill reef runs through it; but whether that is so or not, it is a fact confirmed by telegram a few days ago, that at a depth of 100 feet the reef, which was only 4 feet wide at a shallow depth, has widened out to a magnificent reef of 18 feet in width, and that according to the telegram, at a depth of 150 feet it has widened so as to show an ore bed of 20 feet in width. A later report states that the lode on the lower level is infinitely better, and is exactly like the Brownhill lode. Well, if this property should turn out like its immediate neighbour, the Hannan's Brownhill, all I can say is that the holding we have in that company alone will be of a value more than twice the whole of our capital. (Applause.) After stating that owing to a difference of opinion between the directors and Mr. Spencer Elam, their late representative in Australia, that gentleman had resigned, and they had appointed Mr. Charles Oden in his place, the Chairman proceeded: Besides these various properties, we are in treaty about a number of others, some very large and some smaller, and we hope that by the time we meet you again we shall be in a position to give you as good an account regarding them as I have given you respecting these we now hold. I may say that in addition to the profit we have made already, exclusive of the cash earned since January 1, the shares which we hold as profit in connection with the operations of this year amount to something like £140,000, and we have decided to declare a fifth dividend of 2s. 6d. per share. In connection with the Meteor, I should mention that one of the companies which we brought out under the auspices of this company was the Bayley's West. You are all aware of the high hopes that were entertained of the Bayley's Reward Mines, and I myself have still hopes that it may turn out very well. Bayley's West was started at a time when everyone thought highly of that district, and we obtained a considerable number of subscribers. Unfortunately, for some reason or other, that mine has not met with success. An attempt has been made to bring pressure to bear upon the West Australian Gold Concessions, in favour of the shareholders of the Bayley's West Gold Mining Company. But long before that pressure was brought to bear I had some conversation with our solicitor, Mr. Crisp, in order to ascertain to what extent we should be justified in meeting the legitimate wishes of the Bayley's West shareholders. We had arrived at the conclusion that, though in our opinion these shareholders have no legal hold or claim whatever upon us, it would be only fair on the part of this company to make such an offer to them for an exchange of shares in one of our really good companies. That would take the wind out of the sails of the one or two agitators in that company who are trying to injure us. In doing this we are acting within the powers conferred upon us by the Articles of Association. We have decided to offer to the Bayley's West shareholders certain shares in the Meteor in exchange for their shares. In some instances share for share will be given in the case of those who have put their money into the concern, and in other instances at a lower rate. There is one other matter I wish to refer to, and that is as to the preference shares. The number of these shares issued is 13,170, out of a total of 15,000. Rightly or wrongly, some of the preference shareholders wish to convert their shares into ordinary shares. As a matter of fact, there is no distinction between the two classes of shares, except that there appears to be a better market for the preference. I do not see that the interests of the ordinary shareholders would suffer by allowing such an exchange of shares to take place, but as directors we do not in any way desire to coerce the wishes of the ordinary shareholders. Among many pleasing letters congratulating the directors on the result of their work, I have one letter only objecting to this proposed exchange of shares. That is the only opposition I have heard of, but I should like to hear the views of the shareholders present. As to the preference shareholders who are present, I must tell them that if the ordinary shareholders should approve of such an exchange, it will render necessary the registration of the company, which, however, will not in any way interfere with the businesses that we are carrying on. Legal formalities will, however, take some little time, and you must not, therefore, hope to receive the ordinary shares in exchange for the preference before the end of this year. It will also necessitate the calling of an extraordinary meeting to authorise the re-registration of the company. I now propose that the report and the statement of accounts be received and adopted.

Mr. CARMICHAEL seconded the resolution.

In reply to Mr. WILLIS, the CHAIRMAN said that since the date of the balance-sheet, 12,000 shares had been issued, of which 8000 had been fully paid up, and the remaining 4000 were in course of payment. These were nearly all issued at a time when the company's shares were standing in the market at about 25s., but the directors obtained a premium of 10s., which, of course, represented so much profit. The number of shares actually issued at the present moment was 65,000.

Mr. WILLIAMSON suggested that instead of the company being re-registered, the preference shareholders who wished to get rid of their shares should sell them, and buy such ordinary shares as they might wish for.

The CHAIRMAN pointed out that that would leave a large number of preference shares in the company, and the desire of many holders of both classes was that there should be only one class of shares. In reply to the questions put by Mr. Garston and those asked by Mr. Lawrence, Mr. Stevenson, and others, the Chairman stated the interim dividend proposed was out of profits earned in respect of the year 1896, being cash earned since the last dividend was paid. The accounts presented were drawn up in the same form as those of some of the foremost Western Australian companies.

Mr. GARSTON moved, as an amendment, that the report and accounts be not adopted, but the amendment not being seconded, the CHAIRMAN proposed that the report and statement of accounts be received and adopted.

The resolution was seconded by Mr. CARMICHAEL, and, after a discussion, was carried.

In reply to a question when the dividend warrants would be posted, the CHAIRMAN said they would be sent out on September 14.

Mr. Oppert was re-elected a director, and the auditors having been re-appointed, a vote of thanks to the Chairman closed the meeting.

### GEM OF CUE GOLD MINE, LIMITED.

An extraordinary general meeting of the Gem of Cue Gold Mine (Limited) was held on Thursday, at Winchester House, Old Broad-street, E.C., Mr. C. H. TINDAL (the Chairman of the company) presiding.

The SECRETARY (Mr. E. H. Young) read the notice calling the meeting.

The CHAIRMAN said: Gentlemen—As this is a meeting called for a special purpose, I do not propose to go into the works that have been carried on at the mine in any detail; it will be sufficient for my purpose at present to say simply that the total length of the shafts, crosscuts, and other works there amount to 888 feet. This quantity of work, and the indications to be derived therefrom, have justified your manager, Mr. Whitelaw, in stating with considerable certainty that we have a reserve of ore in the mine amounting to 20,000 tons, carrying 2 ounces of gold to the ton. This means a sterling value of £160,000. Comparing this with our capitalisation of £45,000, of which I believe I am right in saying only £40,000 has been called up, we have a result which I think ought to be eminently satisfactory to us as shareholders. With the mine in this condition, it has been a source of considerable anxious thought to your directors as to how they can best put this ore upon the market. Now, there were two courses open to us. The one was to avail ourselves of the public battery; and when we came to consider this we found the expense that would be incurred and the delay which would arise would not justify our doing this. The other alternative was to erect a mill of our own, and when we considered this point we were at once confronted with the difficulty that there was no really good site upon the Gem of Cue property for the erection of this machinery. We, therefore, consulted our manager, Mr. Whitelaw, and he recommended that we should purchase the adjoining lease, called the Stawell. This property has the advantage of having a site which can be readily adapted for the erection of our mill, and the further advantage that the Gem of Cue itself passes through the entire property. We have also reason to believe that another additional reef, called the Light of Asia, runs into the property as well. This, you will see, vastly increases the value of our property, and I may say that, although it does so increase the value to a remarkable extent, still we have been able to obtain the offer of it on very reasonable terms. It is entirely a share transaction. For the property the vendors will receive £80,000 in shares of the Gem of Cue, and we have also got from them certain concessions with regard to finding capital which they require us to get to develop this additional property. It comes to this, that they wish us to increase our capital by £15,000 as a sort of reserve, in case we require it to develop our property in the future, and, at the same time, they wish us to issue the remainder of the original capital which has not yet been issued. We have made a bargain with them that if we do this they will give those subscribing for that unissued capital a bonus of 50 per cent. in original vendors' shares. This offer we thought such a good one that we decided that our shareholders should have the benefit of it, and that we would not go to the outside public for it. (Applause.) We, therefore, circularised our shareholders, telling them of this arrangement, and we have every reason to believe that we shall get the money from them. Of course, if we do not get the money from them, we still think that we shall find plenty of people ready and willing to subscribe for it. I think that really is all I need trouble you about this morning. I look forward myself to the property being an exceedingly valuable one, and when our mill is erected—which we shall promptly do—we shall then have a mine which should be dividend paying within a very short period. I confidently anticipate that with the reserve of ore we have the shares of the Gem of Cue will go to a very considerable premium. In conclusion, I have only now to move the resolution, which is, "That the capital of the company be increased to £60,000 by the creation of 60,000 new shares of 5s. each, and that such new shares may be allotted or otherwise disposed of to such persons, at such times, and on such terms as the directors may think most expedient in the interest of the company." (Applause.)

Mr. WESENCRAFT seconded the resolution.

Major JOSEPH said that he was in no way hostile to the course the directors now proposed, but he did not like the resolution as it stood. He did not wish to move an amendment if the resolution could be somewhat altered. What he wished was to guard against anyone having the shares at 3s. or any less price than 5s. He believed if the directors were not quite successful in their first application, there would be no difficulty of disposing of them to those who had already taken a considerable quantity of the shares.

The CHAIRMAN: Personally, I see no very great objection to what Major Joseph proposes, but there is one thing I must point out—viz., that you cannot issue shares at a discount. We have made such arrangements with the vendors that those who subscribe for a certain number receive a bonus of 50 per cent., which makes you pay something like 3s. for your share.

Major JOSEPH: It would be in this way, that anybody taking 100 new shares would get 50 bonus shares, and they would then come out at 3s. 4d. Now, the market price is 2s. 9d. to 3s. 8d.; but a man going on the market to buy would not benefit the company.

Mr. WESENCRAFT: But can you get any for 3s.?

A SHAREHOLDER: That 50 per cent. in fully-paid shares only applies to the unissued shares?

The CHAIRMAN: Yes.

Mr. JENNINGS: Representing as I do the original vendors of the Gem of Cue, the proposition touches us as nearly as it touches the other shareholders, for we also are shareholders, and we shall be only too glad to see the arrangement which has been made by the directors of the Gem of Cue carried through; and for this reason, that we see a very large increase in the intrinsic value of the shares in the transaction which is contemplated, quite apart from any market value, and we always are exceedingly anxious that the shareholders themselves, as individuals, should be the ones who should profit by that. Of course, this additional capital can be got with the greatest ease on terms from half a dozen different quarters, but it is always better that the shareholders of a company should themselves take all the benefit they

can get from an arrangement of the kind, instead of putting the profit into other people's pockets. For that reason we met the directors of the Gem of Cue immediately, and said we would place £3000 of shares at their disposal for the sole and exclusive purpose of enabling the shareholders themselves—many of whom have come into the company at a high premium, some I know having paid as much as 7s. for their shares—to come in and average. It does not matter to the Gem of Cue board, or to the original vendors of the company, whether the money is got from the shareholders themselves or from anybody else; but if they can make such arrangements as will enable the shareholders to reap the benefit they are only too pleased to do so. (Applause.)

Major JOSEPH: My shares cost me 6s. 9d., without brokerage, and probably there will be no necessity for making a reduction at all.

If you say that you have not the power to issue the shares under 5s., that is all I wish.

If you do not have sufficient applications to your first offer, you might again give us the opportunity of subscribing.

The CHAIRMAN: Certainly.

A SHAREHOLDER thought that the proposition had better be allowed to go through as it now stood.

Mr. JAMES BACON: As representing my own holding, and also having proxies from several shareholders of this company, I have listened to your remarks with a good deal of pleasure, and as far as myself and those I represent are concerned, I shall be very pleased to give effect to your wishes in every way. I have applications for the new shares in my pocket, and have a great many more promises. (Applause.)

The CHAIRMAN then put the resolution to the meeting, when it was carried unanimously.

A vote of thanks to the Chairman closed the proceedings.

### OCEANA COMPANY (LIMITED).

An extraordinary general meeting of the shareholders in the Oceana Company (Limited) was held at Winchester House, E.C., on Monday.—Mr. H. Pasteur, who presided, moved the following resolution:—"That the company be wound up voluntarily under the provisions of the Companies Acts, 1862 and 1867." He said the meeting was called to give effect to a resolution passed on July 13 last for the amalgamation of the company with the Africana Company (Limited) and the Austral-African Company (Limited), by passing a resolution for the liquidation of the Oceana Company. The assets of this company had been transferred to the Oceana Consolidated Company, as had also the assets of the Africana Company and of the Austral-African Company. Nothing now remained to be done but to formally wind up the three companies. This, of course, they must do before they could issue the shares in the consolidated company in exchange for the old certificates. The consolidated company had been duly formed, and was being managed temporarily by a board of directors, consisting of the Chairmen of the three companies. The full board would be formed after the resolution for winding up had been passed by each of the old companies.—Mr. Ballcock seconded the resolution, and after a short discussion it was carried.—Subsequently meetings of the shareholders in the Austral-African Company (Limited) and the Africana Company (Limited) were held, when similar resolutions were proposed by the respective Chairmen (Mr. J. R. Murray and Mr. L. R. C. Boyle), and agreed to.

### CORNWALL MINERALS RAILWAY COMPANY.

An extraordinary general meeting of the shareholders in the Cornwall Minerals Railway Company was held on Tuesday, at the offices, 17, Victoria-street, S.W., for the purpose of appointing two liquidators to wind up the affairs and distribute the balance of the assets.—Mr. J. J. Chamberlain, who presided, said by agreement they had sold the line to the Great Western Railway Company. The sale was agreed to in April, and the Act received the Royal assent with remarkable rapidity. Originally their Bill was promoted for the purpose of raising money, but it was afterwards converted into a Bill for receiving money. The directors struggled for many years to bring the company into such a position as would benefit every class of shareholder, and now the assets were to be distributed among every class. For three years before the Courts the directors tried to carry a scheme of arrangement, and ultimately succeeded. That scheme gave the company the start which enabled them to devote some attention to the further development of the line, and the board had struggled for the last 10 or 12 years in order to promote the success of the little railway. He moved that Messrs. R. H. Read and T. S. Soden be appointed liquidators at a combined fee of £600.—Mr. J. H. Lancashire seconded the resolution, and it was carried *unanimously*.—The meeting then terminated.

### NEW GORDON DIAMOND COMPANY (LIMITED).

The adjourned meeting of the debenture-holders in the New Gordon Diamond Company (Limited) was held at Winchester House, on Wednesday, Mr. Frederick Whinney presiding, for the purpose of receiving a report from the committee appointed to ascertain how the interests of the debenture-holders were affected by the inability of the shareholders to obtain a renewal of the lease of part of the claims worked by the company.—Mr. Carl Meyer (Chairman of the committee) said the committee had discussed the whole situation with the directors, and the conclusion arrived at was that the scheme which the directors had put forward should be abandoned. It was felt that it would be to the best interests of the debenture-holders that this course should be adopted, and it was in accordance with the advice which the committee had tendered to the directors. At the same time, it was only fair to say, for the assurance of the debenture-holders, that in proposing not to go on with the scheme the committee would naturally make it their business to look after the interests of the debenture-holders, which were identical with those of the De Beers Consolidated Company. He then proposed the adoption of the committee's report.—This was seconded and agreed to, and the reappointment of the committee was also decided upon, the question in reference to the renewal of the lease of the 220 claims being left to them to decide.

### RALKIS EERSTELING (LIMITED).

An extraordinary general meeting of the shareholders in the Balkis Eersteling (Limited) was held on Tuesday, at Winchester House, E.C., for the purpose of passing resolutions for the reconstruction of the company.—Mr. H. G. M. Conybeare, who presided, explained that at the last meeting of the company the directors' reconstruction scheme was, on his advice, negatived in consequence of the offer of Mr. H. Samuel to underwrite the share capital of the new company. The new scheme had been framed in accordance with the wishes of the shareholders, and all that was requisite now was to pass the necessary resolutions.—Mr. Allen seconded the resolutions.—Considerable discussion took place, in which several shareholders strongly criticised the past policy of the board, and urged the desirability of all the directors being replaced.—It was pointed out that at the statutory meeting of the new company, which will be called the Balkis Eersteling Gold Mines (Limited), all the directors retired, and the question of the constitution of the board could then be considered.—The resolutions on being put were carried, and the meeting terminated.

### HENDERSON'S NIGEL (LIMITED).

The second ordinary general meeting of the shareholders in Henderson's Nigel (Limited) was held on Thursday at the offices of the company, 85, Gracechurch-street, E.C., when the Chairman (Mr. W. P. Henderson), in moving the adoption of the report and accounts, stated that during the past year £3458 had been expended on the mine, a very small expenditure when the amount of work done was considered. The cash in hand, £37,290, would they hoped be quite sufficient to make the property a dividend paying one. The directors were very satisfied with the progress that had been made with the development of the property since it had been in the hands of the general manager, Mr. Donald Dennes.—A report was then presented by Mr. Dennes, who gave details of the operations being carried out at the mine. Two gold-bearing reefs—Nigel and Gigantic—had been proved, and it was anticipated that both could be worked at a profit. In addition, two seams of coal had been discovered. At present it was only proposed to work the Gigantic reef.—The report and accounts were unanimously adopted.

## MINING IN CORNWALL AND DEVON:

### NOTES ON MINING IN THE WEST.

(FROM OUR OWN CORRESPONDENT.)

MR. COLLINS, the Chairman of the Wheal Metal and Flow Company, was able to give a very satisfactory account of the progress made by the company during the past year at the general meeting of shareholders held this week. In spite of the fact that in consequence of the poor response so far made to the second issue of shares since the mine was converted into a Limited Company, the means placed at the disposal of the directors have been very limited, and a large amount of work has been done in developing and exploring the property. The production of tin has quite fulfilled the expectations of the directors, although, up to the present, the output from the Flow and Wheal Fortune Quarry has been very small. These new works were only completed in the spring, and since that period the drought has seriously interfered with the operations. Speaking of the tin market, Mr. Collins quite agreed with the opinion frequently expressed at recent Cornish meetings that there was every indication of a revival in the industry, and an increase in the prices. Experience, he remarked, had abundantly proved that Cornwall had no serious rival other than the Straits, and even in that region, notwithstanding that labour was cheap and the water supply plentiful, it would sooner or later be discovered to be impossible to continue to produce enough tin for the world's consumption at present prices. He, therefore, believed that in Wheal Metal and Flow they had only to wait a little, when the result of their labours would lead to the discovery of some rich deposits, and, what is more important still, a rise in the price of the metal. Should this forecast turn out to be correct, things will go well for shareholders in Wheal Metal and Flow.

DOLCOATH accounts have, as we anticipated, been received with satisfaction, and afford much cause for congratulation to the shareholders. The last dividend paid was, we believe, in April, 1894, and after two years of anxiety and preparation for more extended operations, the mine has again been enabled to show a profit on the six months of nearly £3000. The account is interesting in comparison with some of the old accounts, and the comparison is the best indication of the progress made in the improvement of the appliances of the mine. In the last six months they have returned 102 tons of tin; in the three months ending October, 1894, the sale was 370 tons, or at the rate of 740 tons for the six months. But, although there has been this improvement, it does not go far enough by a long way, because it has to be remembered that before that unfortunate run of ground, which upset everyone's calculations, the mine had returned 600 tons in three months, and there was a prospect of its continuing. That quantity ought now to be capable of being returned, and as the appliances are perfected, and further improvements carried out, the output will doubtless far exceed that. The price of tin has been an important factor naturally in a mine making a large output, and in the past six months it has averaged £2058 in their profit.

THE Royal Cornwall Polytechnic is in some quarters looked upon somewhat in the light of a survival, and its palmy days are no doubt over, but a visit to the annual exhibition is still well worth making. Some interesting papers were read on Wednesday at the joint meeting of the scientific societies of the county. One of the most noteworthy of these was that supplied by Captain Arthur Thomas, of Dolcoath, who chose as his subject "Notes on Cornish Mining in 1896." Captain Thomas—as is only fitting in one who occupies an important position on the staff of the most prosperous mine in Cornwall—does not take a pessimistic view of the future. He pointed out that in spite of the depression, the production of the last five years showed no appreciable falling off. He warmly defended the policy of remodelling the Cornish mines on the lines of the best modern practice. In one case the remodelling might mean the substitution of one or two main shafts for a number of small ones on the same large concern, with the idea of concentrating the winding and pumping; in another case it might mean the amalgamation of two or more small mines to form one large concern. Dolcoath, Captain Thomas might have added, is an example of the first, Carn Brea and Tincoft of the second. He drew attention to one fact which is too often lost sight of by critics of Cornish mining as it is now carried on—that the best mines in the county have grown to their present position from humble beginnings, and that then machinery and dressing floors have been added to from time to time during the period of their growth. The consequence is that their present condition is often a patchwork which is altogether inadequate to modern requirements. The necessity for a change, Captain Thomas thought, was now generally admitted, and among the most important matters in connection with the new order of things he mentioned the following:—An increased output and a consequently diminished cost per ton on the ore treated; the substitution of mechanical appliances for manual labour, especially in such cases as would tend to rapidity of development and transport of stuff; the more constant supervision of labour both underground and at surface; correct records of efficiencies of engines and qualities of materials, with regular analysis of costs in all departments. In conclusion, he made one excellent suggestion, which we hope will be acted upon. The Mining Association and Institute, which was originally formed with the idea of providing technical instruction in mining, has done much splendid work in that direction, but the establishment of schools, assisted by the county, has made it unnecessary for the association to proceed on the old lines. Thus deprived of its original reason for existence, Captain Thomas suggests that the society should take up some new and useful work. There are many directions in which it might be extremely useful to mining, both from the industrial point of view and the scientific, and the Council could not do better than take Captain Thomas's proposal into serious consideration.

Good progress is being made at Great Work, Breage, in clearing the mine of water. They have pumped so far at the rate of 10 fathoms a week, and at the present rate no very long period will elapse before the mine is "in fork." Some men are already at work on tribute, and it is hoped that the number of hands will soon be largely increased.

The offices of the following companies have been removed from Dashwood House to 50, New Broad Street, E.C.:—SOUTHERN AUSTRALIA (LIMITED), HOPE'S HILL GOLD MINES (LIMITED), GOLDEN CREST MINES (LIMITED), LINDSAY'S FIND PROPRIETARY (LIMITED), SHAMROCK GOLD MINING COMPANY (LIMITED), and THE NEW TRANVAAL CHEMICAL COMPANY (LIMITED).

## MINERAL PRODUCTS OF THE UNITED STATES.

CALENDAR YEARS 1891 to 1895.

Products,	1891.		1892.		1893.		1894.		1895.		Products,
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
<b>METALLIC.</b>											
Pig iron, value at Philadelphia.....long tons (b)	8,279,870	\$128,337,985	(c) 9,167,000	\$131,161,039	(c) 7,124,502	\$84,810,426	(e) 6,657,388	\$65,007,247	(e) 9,446,308	\$105,198,550	Pig Iron.
Silver, coining value (d).....troy ounces	58,330,000	75,416,565	63,500,000	82,099,150	60,000,000	77,575,757	49,501,122	64,000,000	(e) 55,727,000	72,051,000	Silver.
Gold, coining value (f) .....	1,604,840	33,175,000	1,596,375	33,000,000	1,739,081	35,950,000	1,910,816	39,500,000	(e) 2,254,760	46,610,000	Gold.
Copper (g), value at New York City.....pounds	295,812,076	38,455,300	353,275,742	37,777,142	337,416,848	32,054,601	360,844,218	33,141,142	381,106,868	38,682,347	Copper.
Lead, value at New York City.....short tons (h)	178,554	15,534,198	173,654	13,892,320	(i) 163,982	11,839,590	(i) 159,331	9,942,254	161,440	10,655,040	Lead.
Zinc, value at New York City... " "	80,873	8,033,700	87,260	8,027,920	78,832	6,306,560	75,328	5,288,026	89,686	6,278,020	Zinc.
Quicksilver, value at San Francisco.....flasks (j)	22,904	1,036,386	27,995	1,245,689	30,164	1,108,527	30,416	934,000	36,104	1,337,181	Quicksilver.
Aluminum, value at Pittsburgh.....pounds	(k) 150,000	100,000	259,885	172,824	339,629	266,903	550,000	316,250	920,000	464,600	Aluminum.
Antimony, value at San Francisco.....short tons	278	47,007	...	56,466	250	45,000	200	36,000	(l) 450	68,000	Antimony.
Nickel (m), value at Philadelphia.....pounds	118,498	71,099	92,252	50,739	49,399	22,197	9,616	3,269	10,302	3,091	Nickel.
Tin....."	125,289	25,058	162,000	32,400	8,938	1,788	(n)	...	(n)	...	Tin.
Platinum, value (crude) at San Francisco.....troy ounces	100	500	80	550	75	517	100	600	150	900	Platinum.
Total value of metallic products.....	...	\$300,232,798	...	\$307,716,239	...	\$249,981,866	...	\$218,168,788	...	\$281,348,679	
<b>NON-METALLIC (Spot Values o).</b>											
Bituminous coal (p).....short tons	117,901,237	\$117,188,400	126,856,567	\$125,124,381	128,385,231	\$122,751,618	118,820,405	\$107,653,501	135,118,193	\$115,749,771	Bituminous coal.
Pennsylvania anthracite.....long tons	45,236,992	73,914,735	46,850,450	82,442,000	48,185,306	85,687,078	51,588,144	78,488,063	51,785,122	82,019,272	Pennsylvania anthracite.
Building stone .....	47,294,746	...	49,706,625	...	33,885,573	...	37,055,030	...	34,688,816	Building stone.	
Petroleum.....barrels (r)	51,291,980	30,526,553	50,509,136	26,034,196	48,412,666	28,332,326	49,344,516	35,522,095	52,983,526	57,691,279	Petroleum.
Natural gas .....	15,500,084	...	14,800,714	...	14,346,250	...	18,954,400	...	13,006,650	Natural gas.	
Brick clay .....	(s) 9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	Brick clay.
Clay (all other than brick).....long tons	400,000	900,000	420,000	1,000,000	400,000	900,000	360,000	800,000	360,000	800,000	Clay (all other than brick).
Cement.....barrels (w)	8,222,792	6,680,951	8,758,621	7,152,750	8,002,467	6,262,841	8,362,245	5,030,081	8,731,401	5,482,254	Cement.
Mineral waters.....gallons sold	18,392,732	2,996,259	21,876,604	4,905,970	23,544,495	4,246,734	21,569,608	3,741,846	21,463,543	4,254,237	Mineral waters.
Phosphate rock .....	587,988	3,651,150	681,571	3,296,227	941,368	4,136,070	906,949	3,479,547	1,038,551	3,606,094	Phosphate rock.
Salt.....barrels (v)	9,987,945	4,716,121	11,698,890	5,654,918	11,816,772	4,054,668	12,967,417	4,739,285	13,663,649	4,423,084	Salt.
Limestone for iron flux.....long tons	5,000,000	2,300,000	5,172,114	3,620,480	3,958,055	2,374,833	3,698,580	1,849,275	2,524,949	2,623,974	Limestone for iron flux.
Zinc white.....short tons	23,700	1,600,000	27,500	2,200,000	24,059	1,804,420	19,987	1,399,090	20,710	1,449,700	Zinc white.
Gypsum.....short tons	208,126	628,051	246,374	671,548	253,615	696,615	239,312	761,719	265,503	807,447	Gypsum.
Borax.....pounds	13,380,000	869,700	13,500,000	900,000	8,699,000	652,425	14,680,130	974,445	11,918,000	595,900	Borax.
Mineral paints.....short tons (x)	49,652	678,478	51,704	767,766	37,724	530,384	41,926	498,093	50,695	621,552	Mineral paints.
Grindstones .....	476,113	...	272,244	...	338,787	...	223,214	...	205,768	...	Grindstones.
Fibrous talc.....short tons	53,054	493,068	41,925	472,485	35,861	403,436	39,906	435,060	39,240	370,895	Fibrous talc.
Asphaltum.....short tons	45,054	242,264	87,680	445,375	47,779	372,232	60,570	353,400	68,163	348,281	Asphaltum.
Soapstone.....short tons	16,514	243,981	23,908	437,449	21,071	255,067	23,141	401,325	21,495	266,495	Soapstone.
Precious stones .....	235,300	...	312,080	...	264,041	...	132,250	...	113,621	...	Precious stones.
Pyrites.....long tons	106,536	338,880	109,788	305,191	75,777	256,552	105,940	363,134	95,549	322,845	Pyrites.
Corundum and emery.....short tons	2,265	90,230	1,771	181,300	1,713	142,325	1,495	95,936	2,102	106,256	Corundum and emery.
Oilstones, &c. ....pounds	1,375,000	150,000	...	146,730	...	135,173	...	136,873	...	155,881	Oilstones, &c.
Mica .....	75,000	100,000	75,000	100,000	66,971	88,929	...	52,388	...	55,831	Mica.
Barytes (crude).....long tons	31,069	118,363	32,108	130,025	28,970	88,506	23,335	86,983	21,529	68,321	Barytes.
Bromine .....	343,000	54,880	379,480	64,502	348,399	104,520	379,444	102,450	517,421	134,343	Bromine.
Fluor spar.....short tons	10,044	78,330	12,250	89,000	12,400	84,000	7,500	47,500	4,000	24,000	Fluor spar.
Feldspar.....long tons	10,000	50,000	15,000	75,000	18,391	68,037	17,200	167,700	12,900	119,775	Feldspar.
Manganese ore.....long tons	23,416	239,129	18,613	129,586	7,718	66,614	7,308	53,635	9,547	71,769	Manganese ore.
Flint.....long tons	15,000	60,000	20,000	90,000	29,671	68,792	38,000	319,200	28,500	239,400	Flint.
Monazite .....	(n)	...	(n)	...	130,000	7,600	546,855	36,193	1,573,000	137,150	Monazite.
Graphite.....pounds	...	110,000	...	104,000	843,103	63,232	918,000	64,010	...	52,582	Graphite.
Bauxite.....long tons	3,900	12,675	9,200	29,900	9,079	29,507	11,021	35,818	17,069	44,000	Bauxite.
Sulphur.....short tons	1,200	39,600	2,688	80,640	1,200	42,000	500	20,000	1,800	42,000	Sulphur.
Fuller's earth.....short tons	(n)	...	(n)	...	...	...	...	...	6,900	41,400	Fuller's earth.
Marl .....	135,000	67,500	125,000	65,000	75,000	40,000	75,000	40,000	60,000	30,000	Marl.
Infusorial earth.....short tons	...	21,988	...	43,655	...	22,582	...	11,718	4,954	20,514	Infusorial earth.
Millstones .....	...	16,5									

The SUBSCRIPTION LIST is now OPEN, and will CLOSE on MONDAY, 31st August, at 4 p.m. for LONDON, and on TUESDAY, 1st September, at 4 p.m. for COUNTRY and ABROAD.

# THE GOLDEN RIDGE (WEST AUSTRALIA) PROPRIETARY COMPANY, LIMITED.

(EAST COOLGARDIE GOLDFIELDS.)

Incorporated under the Companies' Acts, 1862 to 1890.

## CAPITAL

£150,000,

Of which 75,000 Shares will be issued as fully paid to the Vendors in part payment for the property, 15,000 Shares are reserved for future issue, and the remaining 60,000 Shares are now offered for Subscription, the £1 per Share thereon being payable as follows:—5s. on Application; 5s. on Allotment; 5s. on 1st December, 1896, and 5s. on 1st February, 1897, but the Shares may be paid up in full at any earlier date. Out of the £60,000, £25,000 will be available for Working Capital, in addition to the £15,000, at present reserved for future issue, thereby making in all £40,000 thus available, and Subscriptions for the entire £60,000 have been guaranteed by Messrs. STANGE & CO.

### DIRECTORS.

H. E. SHERWIN HOLT, Esq., M.I.E.E. (Chairman Swinburne and Co., Limited), Chairman.  
Major DOUGLAS C. DEAN-PITT, late R.A. (Chairman Barbark's North G.M. Co., Limited).  
Captain C. C. LONGRIDGE, late R.A., M.Inst.M.E.  
W.M. ABDY BEAUCLERK, Esq. (Plater and Beaucleerk, 5, Austin Friars, E.C.)  
\*G. J. DU CLOUX, Esq. (Stange and Co., 9, St. Mildred's Court, E.C.)

\* Will join after completion of purchase.

### BANKERS.

THE UNION BANK OF LONDON (Limited), 2, Princes Street, London, E.C.  
THE BANK OF ADELAIDE, Leadenhall Street, London, E.C., and Adelaide, S.A.  
THE WESTERN AUSTRALIAN BANK, Kalgoorlie, W.A.

### BROKER.

Mr. W. DE NEUFVILLE, 11, Copthall Court, London, E.C.

### SOLICITORS.

Messrs. CLARKE, RAWLINS, and CO., 66, Gresham House, Old Broad Street, London, E.C.

### AUDITORS.

Messrs. BLAKEMORE, CHANTRY, and CO., Chartered Accountants,  
27, Moorgate Street, London, E.C.

### SECRETARY and OFFICES.

Mr. EDWIN HABDEN, Finsbury House, Blomfield Street, London, E.C.

### PROSPECTUS.

to exist in them are opened up by shafts, drives, and crosscuts, and when water is obtained, to erect reduction works, selecting, after trial treatments on a large scale, the process most suitable to the class of ore.

The whole property being too large to be worked profitably under one management, subsidiary companies will be formed to take over some blocks when sufficiently developed, and it is anticipated that the shareholders in this, the Parent Company, will receive large profits in cash and shares out of such transactions, retaining their interest in the remaining parts of the mine.

Since the dates of the reports by Captain Wm. Oats and Captain J. Treloar, the work of opening up the property has been actively continued, and from the cablegram from Captain Oats, dated 20th July, 1895, they appear to have increased considerably in value.

It is intended to appoint a Colonial Board, and proposed to elect Mr. Chas. Rasp and Mr. Frank A. Russell, of Adelaide, S.A., as members of such Board, with a view to having local supervision and a Colonial Register.

Messrs. Stange and Co., who are the vendors to and promoters of the Company, have fixed the price to be paid to them for the properties—namely, £110,000, out of which they pay all the expenses of the formation of the Company and completion of the purchase, as well as the other expenses incurred on behalf of the Company up to the first general allotment of Shares.

Full Prospectuses and Forms of Application can be obtained from the Bankers, Brokers, and at the Offices of the Company. Full Reports accompany the Prospectus.

FINSBURY HOUSE, BLOMFIELD STREET, LONDON, E.C., 14th August, 1896.

**THIS** Company has been formed to acquire and work an important Gold Mining Property, some miles East of the well-known Great Boulder and Lake View Mines in the East Coolgardie Goldfields, Western Australia, comprising an area of 132 acres or thereabouts, and held under leases from the Government of Western Australia, in accordance with the Goldfields' Act and Regulations, together with all machinery and mining material thereon. The leases are numbered as follows:—

No. 2310, 2312, 2313, 2314, 2315, each 24 acres.

No. 2316 of 12 acres.

Total area, 132 acres.

The properties were taken up some time ago, and have, as appears by the reports after-mentioned, been developed to the following extent:—Five shafts have been sunk to depths of from 45 to 62 feet, revealing several veins and ledges, varying in width from 6 to 17 feet, and proved to contain gold at the rate of

from one to nearly four ounces per ton.

The well-known Captain Wm. Oats, Manager of Hannan's Orosa and of the Associated Gold Mines of W.A., as also Captain Treloar, who has great experience in Australian Gold Mining, have reported favourably on the properties, as will be seen by the copies of their Reports accompanying the Prospectus.

A parcel of stone received from Captain Treloar as taken by him out of the mine, and in which only a few specks of gold were visible, gave on assay by Messrs. Johnson, Matthey, and Co., the result of

38 ozs. 19 dwts. 9 grs. of gold per ton of ore.

It is the intention of the Directors to vigorously develop the various properties, and when the ore bodies proved

## LATEST FROM THE MINES.

### CABLEGRAMS AND TELEGRAMS.

**ALMADA AND TIRITO.**—The following cablegram, dated August 26, has been received from the mines:—"150 feet levels are now connected; commences stoping immediately. Taylor's shaft has reached a depth of 250 feet."—Note. The levels above referred to are the 150 feet south of Taylor's shaft and the 150 feet north of Wilde's shaft.

**ALADDIN'S LAMP.**—The following cablegram has been received from the superintendent at the mines:—"Four weeks' return totals 1539 ounces of gold (approximate value, £5640)—viz., 239 tons of ore have been crushed, yielding 1148 ounces, and 3 tons rich crude ore have been shipped, containing 391 ounces."

**AMERICAN BELLE.**—The following cable information has been received from the mines:—"Output for July month, National Belle Mine, 165 tons, value \$380; Hudson Mine, 105 tons, value \$625."

**BAKER'S CREEK.**—Result of crushing to August 21: 520 ounces retorted gold.

**BAYLEY'S REWARD CLAIM.**—The following cable, dated the 26th instant, has been received by this company's London office from its head office at Melbourne:—"298 ounces partial clean-up copper plates. Bayley's Reward No. 1 South Gold Mining Company 75 tons, 151 ounces."

**BIG VALLEY.**—The resident managing director informs the board by cable:—"The drain and drainage tunnel have been run 400 feet. Prospects very encouraging; every indication of good results in creek when bed rock is reached."

**BONNIE DUNDEE.**—The directors have received the following cablegram from Charters Towers:—"Have crushed 281 tons of quartz for 231 ounces of gold. Shaft has reached depth of 1450 feet. Have crushed a formation in the shaft; will cable again as soon as I know what it is like."

**CENTRAL CHILLI COPPER.**—The directors have received from their manager at Panucillo, by cable:—"Result of work for month of July:—Mines produced 1500 tons, ore bought 1300 tons, ore smelted 1900 tons, regalum produced 279 tons, net profit for the month £434."

**CHARTERS TOWERS CONSOLIDATED.**—The following cablegram has been received from Charters Towers:—"Have struck a good body of ore in the tunnel."

**CROWN UNITED.**—The following cable, dated Coolgardie, August 25, has been received from the company's engineers:—"Rich shoot has been struck in the stope, we estimate would yield 10 ounces free gold to the ton; the stone is highly mineralised, about 4 feet of reef in present face; inspected personally; machinery in first-class order; expect to commence crushing on Monday; delay in crushing caused by scarcity of water."

**CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA.**—Translation of cablegram received from the manager at Coongan, August 21:—"Have cleaned up after crushing 79 tons of quartz, gross yield 94 ounces. Mill stopped for boiler to be cleaned and repaired. Mill working eight hours per day. Can do better during next month. Water increasing. Mine has improved."

**CONSOLIDATED MURCHISON.**—Crushings for the month of August:—Crushed 1042 tons, obtained 484 ounces of gold.

**CRIPPLE CREEK CONSOLIDATED.**—The acting manager telegraphs:—"Have struck pay ore in the shaft; looks like holding down."

**DIXIE.**—Copy of cable received from the Chairman, Mr. W. P. Smith, dated Coolgardie, August 22:—"Good progress is being made; improvement likely to last."

**DAY DAWN BLOCK AND WYNDHAM.**—Cablegram from the general manager at Charters Towers, giving the result of the crushing for the fortnight ending the 22nd inst.:—"Tons crushed, 1200; yield of gold, 1011 ounces; approximate value, £2500; fortnight's expenses £2190."

**DESIRABLE (Norseman).**—The following cable has just been received from the manager, Captain Stephenson:—"Whip shaft has reached a depth of 139 feet. Ore in the shaft is improving as it goes down, full of visible free gold." We are further informed that the Desirable property has been acquired by the Lake Cowan Syndicate, recently floated in London, and comprises 92 acres, and has a battery of 10 head of stampers working on the mine.

**EAST RAND GOLD, COAL, AND ESTATE.**—A cablegram has been received from the head office reading as follows:

"Have struck Nigel reef by borehole 650 feet; formation regular, thickness of seam 6 inches; assay will follow. This important discovery is of greatest importance to company."

**EAGLE'S NEST (Mount Margaret).**—The following cable has been received from the manager, Mr. Wilton Hack:—"Have struck water in mill site. There is abundance of water fresh 80 feet. The necessary work for developing the mine progressing; now preparing for battery."

**EAST RAND GOLD, COAL, AND ESTATE.**—The London agents are informed that it has been decided to continue boring, in order to further prove the reef, in addition to the strike which has lately been notified.

**GREAT BUNINYONG ESTATE.**—Alluvial shaft now going down at large dimensions for plunger workings; sunk 16 feet for the week; full depth 208 feet. Quartz shaft being skidded in two compartments, and rapidly drawing near completion.

**GOLD ORE TREATMENT.**—The following official telegram from Mr. Frank Reed, Government Inspector of Mines, addressed to the Under-Secretary for Mines, has been communicated to the company's manager, Mr. Edward Hooper:—"Cas, July 22. To the Under-Secretary for Mines.—Remarkable results obtained at first installation of Sulman's bromo-cyanide process at Day Dawn, 300 tons of tailings treated in 15 hours. All gold extracted but 10 grains per ton, which were found unextractable by aqua regia. Total cost of treatment, including depreciation and interest, 3s. 10d. per ton, notwithstanding high expenses on Murchison. Result unprecedented. Will revolutionise gold extraction, and prove immensely beneficial to the colony. Inspected process yesterday. Forwarding report for annual report."

**GOONGARRIE GOLD FIELDS.**—A cablegram has been received from the manager of the Goongarie Mine to the effect that the erection of machinery is rapidly approaching completion, and that crushing will commence about October 12; it is also stated that the water supply is ample for all purposes. The later developments are reported to be of a most satisfactory character.

**HANNAN'S LAKE VIEW CENTRAL.**—"The property (Lease No. 282 E.) has been duly transferred to the company."

**HANNAN'S PROPRIETARY DEVELOPMENT.**—The following cablegram, dated Perth, August 25, has been received from Mr. Gray, the company's engineer and manager:—"Lawyers advise transfer has been duly executed; Lake View East and Hannan's Golden Pike, Lake View east, lode opening well. Ore contains visible gold."

**HANNAN'S KING (Brownhill).**—The following cable report has been received from the mine manager on the property at Kalgoorlie:—"No. 2 shaft is now down 105 feet. Have discovered a rich streak of ore which assays well."

**HIGHLAND CHIEF.**—Cable received August 26:—"Have struck ore on the 65 feet level south. The richest ore we have yet found."

**LONE HAND.**—The shareholders have received the following cable from the mine, dated Coolgardie, August 24:—"Sunbeam north 105 feet level has at present a length of 71 feet. The level is at present running through 2 feet 6 inches ore. Average sample of the ore 2 ounces."

**LYDENBURG.**—Copy of a cable received from the manager, Mr. E. Howse:—"Everything looks encouraging. Starting to crosstake to the vein. Diamond drill is now in course of erection to sink on the dip of the strata. Have made a new discovery, but prospects as yet uncertain."

**LUCKY GUSS (Cripple Creek).**—Telegram from manager:—"Sinking new shaft 25 feet. Net proceeds \$4050. Have made rich strike in Mountain Beauty, near Guss line." Extract from manager's letter, dated August 12:—"From the strike of the vein, as far as shown in the shaft, it will run the full width of the claim. I feel very sure it is not the Orpha May vein, but a new one entirely."

**MAORI.**—The following cablegram has been received by the company:—"100 tons crushed for 202 ounces (without tailings). Ship at once further supply of petroleum. Development at the mine not so satisfactory as we could wish."

**MAORI SOUTH (Menzies).**—A cable has been received from the manager, dated August 20, as follows:—"Struck reef in main shaft yesterday; good gold."

**MENZIES GOLDEN AGE.**—The directors have received the following cable from the Hon. M. Hume-Black, dated August 25:—"Have crushed 55 tons; an average sample; result, 6 ounces 8 dwts. per ton; tailings assay 32 dwts. per ton; is most satisfactory."

**MURCHISON NEW CHUM GOLD.**—The following cable advice has been received from the mine:—"The bottom level appearances are exceedingly favourable. Have driven upon the

vein a distance of 12 feet; the vein has now widened out to 2 feet; the vein is strong and well-defined; ore contains visible gold."

### NEW COOLGARDIE EXPLORATION AND FINANCE.

The secretary has just received the following cable from the company's representative in Adelaide:—"The newspapers have reported Norseman Queen West Mine, near Eden Park, struck sensational gold; 7 lbs. weight of pure gold broken off near the surface. Dundas Mount Henry great rush. Country pegged for miles. Most available by prospectors and Young. Norseman coming leaps and bounds; must have railway. Allotments Dundas Norseman advancing rapidly. Young telegraphed August 19 secured 72 acres on the line, and on August 20 secured another 72 acres. Mr. Young is one of the explorers sent out by the New Coolgardie Exploration Company, which was floated in London a few weeks ago."

**NEW GUSTON.**—The following cable information has been received from the mines:—"Output for July month, 111 tons (say 1110 tons); value estimated, \$5700; mine expenses, \$800; expended on exploratory works, \$2800."

**OREGUM.**—Telegram from the mine, dated August 25:—"Have cut a vein Wallroth's shaft, 8 inches, of a very low grade."

**ORITA.**—The London office has received the following cablegram from their superintendent relating to run No. 91:—"We have cleaned up £350."

**PAHANG CORPORATION.**—Returns for July:—Jenah Lumpong mill. In 26 days of 24 hours each 1035 tons of stone were crushed, producing 42 tons of black tin; 20 heads of stamps running; working costs, \$10,250.—Joram Batang mill. In 23 days of 24 hours each 840 tons of stone were crushed, producing 35 tons 4 cwt. of black tin; 20 heads of stamps running; working costs, \$6500.

**PAN AMERICAN.**—The following cable has been received by the London agents from the mine managers:—"Ore shipped averages \$45 per ton. Started new shaft Gold Hill property."

**ROME CONSOLIDATED.**—A telegram has been received from Coolgardie to the effect that the transfer of the property to the company has been completed.

**ST. JOHN DEL REY.**—The following telegram has been received from Mr. Chalmers:—"Produce 10 days, second division August, 7250 oitavas, equal to 835 ounces troy; value, £2820; yield per ton, 3.8 oitavas."

**SPITZKOP FARM.**—The manager wires:—"Mill working day and night. Everything is going right."

**SANTA ANNA GOLD.**—Produce for the month of July was cleaned up 1st inst., and amounted to 1182½ oitavas, equal 136 ounces.

**SAN MIGUEL.**—The secretary has received the following telegram:—"Have found ore San Lorenzo under 115 (metres) level; ore shows ruby silver."

**UNITED GOLD FIELDS OF MANICA.**—Rozende red. The manager (Mr. Ferguson) reports, by cable, dated August 17, that work has been resumed with 25 natives, and is progressing steadily. The assayer had arrived at Umtali. No. 1 shaft at 130 feet assays 11 dwts.; No. 3, at water level, 13 dwts.; No. 4 is in pocket of ore, 4 ounces 3 dwts.; No. 5, at water level, 13 dwts.; No. 7, traces only; No. 8, 14 (?) dwts. No. 2 shaft has struck the reef at 112 feet, 8 feet thick.

**WAIIHI SILVERTON EXTENDED GOLD.**—The following cable has been received from the mine:—"Have cleaned up after crushing 800 tons, £1400. In driving we have intersected a new lode, likely to prove a valuable ore body, average assay of lode being value per ton £6 5s. Further particulars as soon as possible."

**WAIIHI GRAND JUNCTION.**—The manager cabled on August 22:—"Grand Junction engine shaft is down 444 feet, and shows considerable signs of improvement. Waiki west prospecting shaft cross cut south is driven 267 feet."

**WESTERN BLACK REEF.**—A cable has been received as follows:—"Brandolei. Reef is a splendid one and extends full length of property; developments opening up splendidly." Following the above, a cable has been received four days later:—"Brandolei. Have discovered another reef on the property."

**WAIIHI.**—Bullion return for 28 days, ending August 22, £8800 from 2900 tons. The superintendent estimates that in addition to the above £1000 has been retained by the new miners in the boxes.

The directors of the DAY DAWN BLOCK AND WYNDHAM GOLD MINING COMPANY (LIMITED) have declared an interim dividend (free of income tax) upon the 495,400 shares issued at the date, payable on September 15.

## CORRESPONDENCE.

*We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.*

### THE STRUCTURE OF THE PYRENEES.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR.—In my letter of the 15th inst. an error occurs. South has been written for north in the nineteenth line. Such errors are inevitable, and, copied and recopied, have originated the new geology. South of the bridge of Lugagnon I have found the same fossils. No imaginable quibble can be raised regarding the identity of the slates with those classed and figured as Primary and Silurian repeatedly since 1865. But the first large quarry after Lourdes, 300 yards before the main bridge of Lugagnon on the road to Argelès, affords, through feeble metamorphism and abundance of moulding pyrites, the greatest abundance of determinable Cretaceous ammonites.

The Primary or Silurian age of these slates is taken as conclusive proof of the dogma that neither granite nor granulite penetrates and utterly changes the Cretaceous rocks of the Pyrenees. To maintain the same dogma, the beds of the Alps are figured in lovely and impossible curves and contortions, that resemble no correctly-surveyed stratigraphy on earth. To support this dogma hundreds of sections have been designed, innumerable phrases have been printed by official presses, and crushing rebukes have been never wanting. Official microscopists, paleontologists, and writers on geology have only omitted to devote to the practical examination of the rocks a decent fraction of the time wasted in preparing fiction for the press. They imagine that literary industry and chromolithography can conceal the fictitious character of sections that refute themselves, not merely in general absurdity, but in recognisable practical details.

In the Pyrenees the facts concerning the wildest inversions of Alpine geology are all admirably represented. The ground is fully prepared, and the chromolithographic presses are waiting. The last batch of budding geologists have merely to draw and publish the stratigraphy that inevitably results from bad mapping, hasty classification, and worthless maps, to acquire the notoriety that must accrue to him who renders geology ridiculous and impossible of practical application, and, therefore, the mere arbitrary servant of an official clique. As yet the only geologist who has frankly applied the new geology to the Pyrenees is the author of the new discovery of the Primary slates of Lourdes. This discovery, affecting the entire composition and structure of the Pyrenees, required the prompt refutation I have thought it worth while to give.

Similar discoveries have occasioned the colouring on the latest official geological map of France (1890) of Upper Cretaceous as Cambrian, Lower Cretaceous as Trias, Jurassic as Carboniferous, Trias as Pre-Cambrian, and so on, over thousands of square miles of the Pyrenees. Naturally the inversions of position, the utter chaos of hopeless absurdity, that will result from sections drawn on this basis will create a sensation, and prove that all Pyrenean observers were of the baser sort. But during the progress of this brilliant mapping I have accumulated more than 100 note books, filled with observations recorded step by step on the ground. Whenever an imitation of an Alpine section is published concerning the Pyrenees, I propose to show that the Silurian is not perched on the Cretaceous, for the simple reason that it is not Silurian, but a blunder due to bad mapping and a thirst for brilliant discoveries. No other reasoning will stop the progress of the new geology. Those who cannot understand that a preposterous section merely proves the need of revising probably worthless data are beyond the sphere of argument.

The line taken by my opponents, who have now ceased to gibe quotations, suppress documents, and alter the dates of the papers read to societies after begging me for assistance in their work, which they entirely forgot to acknowledge as they promised to do, is particularly amusing. They make a hasty excursion along the high roads between mountains where I have described and studied for years the details of vast synclines of limestone. As the roads pass beneath the hinges of the synclines, and as they cannot recognise by eye the vast masses of limestone that rise above them on either side, they flatly deny in the *Official Survey Bulletin* the existence and continuity of the limestone I describe. They further imagine lines of ophite that interrupt the said continuity, the fact being that the ophites in question are regularly intercalated between the limestones, and a mile to the north of Ferrieres, and at many other places, pass into granulite in defiance of their favourite theories. Where I cited last year 20 Belemnites they class the rock as Lower Carboniferous, although it is visibly continuous with rocks which they have classed as Cretaceous, and although both parts of the same bed rest on a continuous band of conglomerate characteristic of the base of the received Trias of the Pyrenees, and totally different from any beds of earlier age. On the road from Ferrieres to Argelès, at two miles east of Ferrieres, I have found numerous fossils in the same rock, and traced these fossils along the intermediate ground. Knowing nothing of the locality I mention, and in which this rock is especially developed, and clearly of secondary age, they simply deny its existence at that point. Of course this method of reply may answer for a short time, and in the last resort they possess. The Geological Society of France has had the courage to publish, in May last, a paper in which I have exposed my opponent's work on the Department of the Landes. The publication of the verifiable facts I then present proves that the majority of the society in question will not submit to the suppression of all that conflicts with the assertions of students patronised by the small clique of the late President of the Panama Technical Commission. On the practical application of the geology of the Pyrenees to mining science, I must defer facts that will surprise your readers.—Yours faithfully,

P. W. STUART-MENTRATH.

### THE ZYMEAN PROCESS.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR.—In further reference to this process and its chemical reaction, &c., as named in my last letter, and alluded to in Admiral Selwyn's reply, I would say that since then I have paid the Admiral a special two days' visit, going into the matters and points with him, and found that the Admiral was quite correct. Not only did I not find sodium sulphate present after recovering the metals, but some salt that had been obtained from his solutions some considerable time ago did not contain sodium sulphate. The circumstance is both curious and unusual, but still it is the fact, strange though it seems, yes—

"Tis strange, 'tis true,  
For truth is always strange—  
Stranger than fiction."

However, more acquaintance with the Zymean new metallurgy

will soon enable me to solve the reaction above alluded to, and as I am about to fill up a little of the spare time that will fall to my lot in a few days in treating some British ores in this country in 20 cwt. batches will certainly gain some experience that will be of great value to me, and I hope to readers of *The Mining Journal* interested in cheap metal recovery. Everything that I have submitted to its operation has—after a time—been very quickly dissolved and separated, but full acquaintance with the mineral to be acted upon is very necessary beforehand, or treatment may not be as satisfactory as desired. This cannot be too much impressed upon all experimentalists who attempt any treatment of ores with  $S_2Cl_2$ . Yours very truly,

St. Helens, August 24. JAMES W. WORSEY.

### LIST OF REFINERS AND SMELTERS.

#### COPPER.

**London—**  
Broughton Copper Company (Limited), 122, Cannon Street, E.C.  
Crispin and Co., Margate Lane, Stratford, E.  
English and Australian Copper Company (Limited) (W. R. Caldwell Moor, secretary), 136 and 137, Palmerston Buildings, E.C.  
Lambert, Charles and Co., Leadenhall Buildings, E.C.  
Nevill, Druse and Co., 74, King William Street, E.C.  
Rio Tinto Company (Limited) (George N. Thomson, secretary), 30 and 31, St. Swithin's Lane, E.C.  
Sheffield Smelting Company (Limited) (Thomas H. Morton, London manager), 1, Berry Street, Clerkenwell Road, E.C.  
Vivian and Sons, 3A, Bond Court, Walbrook, E.C., and Limehouse Hole, Emmett Street, E.  
Vivian, H. H. and Co., 49, Laurence Pountney Lane, E.C.  
Williams, Foster and Co., and Pascoe Granfell and Sons (Limited), Leadenhall Buildings, E.C., and 27, Upper Thames Street, E.C.

**Country—**  
Baxter, Henry (John Ingram, agent), 20, Easy Row, Birmingham.  
Baxter, Henry, Parr Copper Works, St. Helens, Lancashire.  
Bede Metal and Chemical Company (Limited) (W. M. Brown, secretary); Works—Hibburn, R.S.O., Durham.  
Bibb, John, Sons and Co., Garston Copper Works, Garston; Liverpool and Rivenhead Works, St. Helens.  
Bolton, Thomas and Sons, Froggall Copper Works, Froggall, Stoke, Staffordshire; Mersey Copper Works, Widnes, Lancashire, and 18, Broad Street, Birmingham.  
Broughton Copper Company (Limited), Broughton Copper Works, Manchester, Cape Copper Company (Limited), Briton Ferry Copper Works, Briton Ferry, Glamorganshire.  
Dennis, J. H. and Co., Cornubia Works, Widnes, Lancashire, and 3, Castle Street, Liverpool.  
Elliot's Metal Company (Limited), Pembrey Copper Works, Burry Port, R. O. S. Wales; 83, Colmore Row, and Selly Oak Works, Birmingham; 9, Irwell Street, Liverpool; and 14, Brown Street, Manchester.  
Elmores Patent Copper Depositing Company (Limited) (James Shurmer secretary), Pontefract Road, Hunslet, Leeds.  
Glasgow Metal Refining Company (John Shields, proprietor), 24½, King Street, S. S., Glasgow.  
Hills, Henry and Son, Amlewich, Port Almich, R.S.O., North Wales.  
Hills, Henry and Son, Anglesey Copper Works, Low Walker, R.S.O., Northumberland.  
Lambert, Charles and Co., Port Tennant Copper Works, Swanses.  
Landore Copper Company (Limited), Landore, R.S.O., South Wales.  
Liverpool Silver and Copper Company (Limited) (The), West Bank, Widnes, Lancashire.  
Logan and Co., Birkenhead Dock Copper Wharf, Birkenhead.  
Mackinlay, R. W. and Son, 140, Great Wellington Street, Kinning Park, Glasgow.  
Mason and Barry, Wallsall, R.S.O., Northumberland.  
Mona Mining Company (Thomas Fanning Evans, proprietor), Almich, R.S.O., Anglesey, North Wales.  
Morris and Co., 12, Priory Place, Doncaster; works, Stockwith-on-Trent, Gainsborough.  
Nevill, Druse, and Co., Llanelli, South Wales and 24, Exchange Alley, Liverpool.  
Newton, Keast, and Co. (agent John A. Fielding), Central Copper Office, 4, Whitworth Street, London Road, Manchester; 28, King Street, and 3, Cooper's Row, Liverpool; Sutton, St. Helen's; Greenfield, Holywell, North Wales, and Broad Street, Birmingham.  
Pass, C. and Son, Bedminster Smelting Works, Mill Lane, Bristol.  
Rio Tinto Company (Limited) (G. N. Thomson, secretary), Grange Metal Works, Jarro-w-on-Tyne and Oswestry; Port Talbot, Glamorganshire.  
Roberts, William, Brookland Copper Works, St. Helens, Lancashire.  
St. Helens Copper Company (Limited) (William J. Thomson, manager), Old Ravenhead Works, St. Helens.  
**Ireland—**  
Vivian and Sons, 68, Lower Gardiner Street, Dublin.

#### LEAD.

**London—**  
Clark, Frederick A. and Son, Phoenix Lead Mills, Marlborough Wharf, Hammersmith, W.  
Enthoven, Henry John and Sons, 17, Gracechurch Street, E.C.; and Upper Ordinance Wharf, Rotherhithe Street, S.E.  
Lane, Sons and Co. (Limited), Old Shot Tower Works, Commercial Road, Lambeth, S.E.  
Nevill, Druse and Co., 74, King William Street, E.C.  
Watney, S. O. and Co., Billiter Building, E.C., and 58, West Ferry Road, E.  
**Country—**  
A. D. Mining Company, Limited (Simon Cherry, agent), Fremington, Richmond, Yorks.  
Alkaline Reduction Syndicate, Limited (The), Hebburn, R.S.O., Durham.  
Cockhill and Sunnyside Lead Mines (Hutchinson and Williams proprietors), Patley Bridge, Leeds.  
Cookson and Co.; works, Willington Quay, R.S.O., Northumberland, and Bank Chambers, Sandhill, Newcastle-on-Tyne.  
Llanasamlet Smelting Company (Limited), Llanasamlet, Swanses.  
Locke, Blackett and Co., WallSEND, R.S.O., Northumberland.  
London Lead Company (Limited) (Thomas Stoddart, manager), Egglestone, Darlington, and (John Joseph Milligan, manager) Middleton-in-Teesdale, Darlington.  
Mill Dam Mining and Smelting Company (J. B. Wostenholme, secretary, Leonard Maltby, manager), Great Hucklow, Sheffield.  
Moore, J. H., Brough Works, Hope (Sheffield), Derbyshire.  
Nevill, Druse and Co., Llanelli, South Wales, and 24, Exchange Alley, Liverpool.  
North Wales Lead Works (Limited), Mann Island, Liverpool, and at Holywell, Flintshire.  
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Pass, C. and Son, Bedminster Smelting Works, Mill Lane, Bristol.  
Quirk, Barton, and Burns, Smelting Works, St. Helens and Orange Court, Castle Street, Liverpool.  
St. Cathbert Lead Smelting Works (Thomas Wilcox, manager), Priddy, Wells, Somerset.  
Scargill Lead Mining and Smelting Company (Limited), 25, Westgate Road, Newcastle-on-Tyne, and Scargill (Barnard Castle), Yorks.  
Sheldow Bush and Patent Shot Company, Crew's Hole, St. George, Bristol, and Cheese Lane, St. Philip's, Bristol.  
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Stoney Groves Company (David Williams, manager), Patley Bridge, Leeds.  
Vivian and Sons, 7, S. Peter Square, Manchester, and 2, Cathcart Street, Greenock.  
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W. B. Lead Office (Wentworth Blackett Beaumont, proprietor; James M. Fothergill, manager), Alien Smelting Mill, and Newcastle Mine, Allendale, R.S.O., Northumberland.  
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York, Thomas Ed., Heathfield Smelting Works, Patley Bridge.

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Redruth Tin Smelting Company, Golden Heart Wharf, Dowgate, E.C.  
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Consolidated Tin Smelting Company (Limited), The (Thomas Willis Field, managing director), Chyandour, Treseife, Penzance, and Carvedras, Truro.  
Cornish Tin Smelting Company (Alfred Lanyon, acting partner), Redruth, Cornwall.  
Heape, J. G. and T. (agents), Leeds Old Lead Works, North Street, Leeds.  
Horn, W. P. and Co., 79, 81, and 83, Lawley Street, Birmingham.  
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Poolton, Richard, 55½, Hurst Street, Birmingham.  
Redruth Tin Smelting Company, Redruth, Cornwall.  
Stephens, James, Black Vale Copper and Tin Smelting Works, Swanses.  
Sutton, Thomas B. and Son, North, South Wales.  
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#### GOLD.

	Feb.	Mar.	Apr.	May.	June.	July.
	Ozs.	Ozs.	Ozs.	Ozs.	Ozs.	Ozs.
Appantoo .....	—	—	376	226	117	
Barrett .....	571	533	400	500	503	650
Block B .....	2,621	2,870	3,153	2,854	2,511	3,075
Buffelsdorn .....	2,539	2,202	—	—	—	
Champ d'Or.....	2,377	2,920	3,360	3,383	3,074	2,969
City and Suburban .....	8,037	8,203	7,835	8,351	8,296	
Crown Reef .....	10,845	11,303	11,498	11,369	10,723	11,011
Durban-Roodepoort .....	5,282	5,558	5,590	5,519	5,604	5,704
Eastleigh .....	1,844	2,100	2,155	1,650	1,850	1,750
Ferreira .....	11,770	12,770	12,219	13,115	13,418	13,601
Forbes Reef .....	144	150	102	67	—	115
Graskop .....	201	310	222	204	180	236
Geldenhuus Deep .....	2,793	3,684	4,046	4,173	4,031	5,180
Geldenhuus Estate .....	5,815	6,204	6,139	5,837	6,889	7,319
Geldenhuus Main Reef .....	1,876	1,881	1,655	1,214	1,589	1,495
George Goch .....	3,082	3,383	4,362	4,660	3,740	3,708
Ginsberg .....	910	938	1,175	1,018	1,015	1,084
Glencalmar Main Reef .....	4,401	4,246	4,527	3,230	3,468	3,824
Henry Nourse .....	5,288	6,166	6,223	6,298	6,649	6,904
Joe's Reef United.....	155	175	227	294	227	249
Johannesburg Pioneer .....	2,698	2,621	2,613	2,810	2,826	3,064
Jubilee .....	2,472	2,323	2,485	3,059	2,502	2,812
Jumpers .....	3,317	3,704	4,202	4,935	4,077	4,960
Lancaster .....	253	—	—	—	—	
Langlaagte Estate .....	9,165	9,568	9,002	9,428	9,131	9,253
Langlaagte Royal .....	—	—	—	3,182	3,704	4,304
Langlaagte Star .....	—	—	—	1,207	1,491	1,816
Lisbon-Berlyn .....	821	842	763	737	655	785
Lydenburg Ming. Estate .....	—	4,945	5,404	6,153	5,770	4,941
May Consolidated .....	3,237	3,8				

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LONDON: AUGUST 29, 1896.

**THE ORIGIN OF PLACER GOLD.**

II.

A NOTHER difficulty that has been often brought forward is that of ascertaining in many cases whence the gold came from, and which was the original deposit, the disintegration of which furnished the gold. Of course, it is obvious that as the gravel deposits can only be formed by the destruction of the original sites of the gold, this destruction may have gone so far as to entirely obliterate that original source, and it may be impossible to discover it, because none of it is left to be discovered except, of course, in the form of gravel. A district that always offered great difficulties in this respect is that of Central Germany and Bohemia, where extensive tracts are known to have been worked as alluvial deposits in early times,

although the original source of the gold had never been discovered. This problem has been, to a great extent, solved by the patient labours of PROSPNY, to whose masterly papers we must refer our readers for further details. He has shown that the sources of the gold need not be gold quartz veins in the ordinary acceptance of the term, but may be auriferous pyrites, or some similar deposit, in which the gold may be present only in very small quantity throughout the mass, but may be subsequently liberated and concentrated by meteoric agencies. The same writer was enabled to trace the gold of many of the great Siberian placers to its original source; in this case the task presented less difficulty, and incidentally the origin of the platinum in many of these placers could also be accounted for by studying the rocks whence they were originally derived.

The placers in our own country—for such exist, though very generally ignored—present greater difficulties. In Ireland, especially in County Wicklow, a good deal of alluvial gold has been found at times, but no gold-bearing veins have been discovered in spite of very careful search, and in spite of the fact that some of the larger pieces of the gold found had fragments of quartz attached to them. There is, however, the possibility that this gold may have come across from the Welsh mountains, where veins of gold quartz are known to exist, transported, perhaps, by ice, and after possibly one or more rearrangements by running water, because gold is, after all, a remarkably indestructible substance.

The alluvial gold of Sutherlandshire is similarly puzzling, no one having yet been able to account satisfactorily for its derivation; most geologists seem to incline to the opinion that it has come from a very considerable distance, and has been transported by means of ice. If we accept this view, the gold veins known to exist in Bömmelö, on the West Coast of Norway, might be a probable source of its origin.

The difficulty of accounting for the origin of a gold gravel is, however, a purely negative piece of reasoning, which can hardly be allowed to weigh for a moment against the number of positive facts that are well known. For instance, taking the Melones Creek, Calaveras County, California, already quoted, this and other creeks are found to descend from a range of hills, the backbone of which, so to speak, is that great auriferous belt stretching north and south for over 30 miles, and known as the Great Mother Lode of California. Now it was found that each of these creeks was rich in gold up to the point where they cut across the Mother Lode, and barren above that point, a phenomenon very difficult indeed of explanation unless we admit the obvious one that their golden freight was derived from this same Mother Lode. This is not a solitary instance; it is only one of many hundreds, which we quote, because it is such a well-known one. Every mining engineer who has had anything to do with alluvial mining can quote similar ones from his own experience. It seems unnecessary, as well as futile, to look for any other explanation of the origin of fine gold in gravel, when we have such a simple one at hand that amply suffices for the vast majority of the cases we have to deal with. It is surely fair to assume that its imperfect knowledge of data rather than faulty reasoning that stands in the way of the complete explanation of all such gravel deposits, and prevents our referring each one to its original source, more especially when we find that an exhaustive study of some of the more difficult cases has enabled them to be thus traced.

Coming next to nuggets, it will be best to examine what reasons there are against referring their origin to the same causes as those which we have seen suffice to account for the origin of fine gold. *A priori*, it would seem natural to attribute both kinds to the same source, and to accept this simple explanation unless we meet with some insuperable difficulty. The great reasons that have always been put forward against assigning this origin to nuggets, and to accepting the mechanical theory in its entirety, are, firstly, their size; and, secondly, their generally greater fineness or purity as compared with reef gold. Some of the largest nuggets known have been found in Victoria, where two, at any rate, of over 2000 ounces, and a good many of over 1000 ounces, have been found. We note, in the first place, that many of these nuggets had a good deal of quartz still attached to them, which would seem to indicate that their original home was in a quartz reef. We may also note that very large masses of gold have been found in quartz reefs; thus in 1872, from a vein at Hill End, New South Wales, masses weighing about 100 lbs. each, which are described as having been nearly all gold, were blasted out. Obviously such a mass, from which, in the course of rolling about in the bed of a stream, the brittle quartz would be mostly removed, leaving the malleable gold, would easily produce a 1000 ounce nugget. In this connection we may refer to the statement of a correspondent published in last week's *Mining Journal*, page 1071, to the effect that a mass of gold, worth \$300,000, say about 15,000 ounces, has been discovered in the De Lamar Mines. At St Arnaud, in Victoria, a quartz vein yielded a lump of gold weighing 500 ounces, and at Black Flag, West Australia, a mass of gold weighing 303½ ounces was got in the outcrop of a quartz reef. We see, therefore, that big masses of gold do at times occur in quartz reefs. It is true that there are fewer of such big lumps recorded from quartz veins than from alluvial deposits, but the reason for this fact is fairly obvious. The bulk of the gold so far obtained in the world has been obtained from alluvial deposits, so that very much more alluvial gravel has been worked over than red quartz. A cubic yard of alluvial gravel, moreover, represents the results of the disintegration of a great many cubic yards of reefs, so that in the aggregate miners have handled, at any rate, many score of times as much reef quartz in the secondary form of gravel as they have in the primary form of reefs. If these big masses of gold have all been derived ultimately from quartz reefs, the laws of probability indicate that the greater

number of gravels products so to a metals, heavy powerful in

number of these masses must have been obtained from gravels in proportion as these represent the ultimate products of a greater quantity of reef quartz worked, so to speak, by natural means. Besides which, it must not be forgotten that gold, like some of the other softer metals, has the curious property of weldability in the cold under heavy pressure; if a mass of spongy gold be compressed in a powerful hydraulic press it will be converted into a solid mass in which the shape of the original granules can no longer be discerned. Obviously several pieces of gold lying close side by side at the bottom of an alluvial drift might thus be welded together into one lump by the pressure of the superincumbent strata. We do not accordingly see any reason to admit that the size of nuggets is any argument against their having been formed by the disintegration of gold-bearing reefs.

As regards their composition, it has been very often said that nugget gold is finer than reef gold, but the statement is certainly not universally true. The finest gold got in the world, for instance, is that from the Mount Morgan Mine, in Queensland, which is 997 per 1000 fine. The reason of this high fineness is partly due to the method employed in its extraction, which is a purely chemical one. Reef gold is usually obtained by amalgamation, copper tables and electro-silvered copper tables being used, and these are apt to part with some of their silver and copper, which will make the gold produced baser than it was originally; and whether copper tables be used or not this is the general tendency of all amalgamation methods, gold produced by them being, as a rule, less fine than gold obtained by simple washing. So that on the one hand it is doubtful whether nugget gold is really finer, as a rule, than reef gold. We should, however, on the other hand, expect to find the gold in a nugget that had lain long in a mass of gravel become purer in the course of time than it was originally. Even since the time of PLINY it seems to have been known that low standard gold, coated with a mass of sand or clay and salt, and heated to low redness for 24 hours or so, is thereby rendered finer. In this process of "cementation," both silver and copper are converted into chlorides and removed, the gold remaining untouched. There is no reason to believe that this operation would not go on at ordinary temperatures in the course of centuries, but every ground on the contrary for supposing that such an action does take place, and that nuggets or masses of comparatively low standard gold would gradually become finer by the chlorination of the silver, and by the chlorination, or perhaps oxidation, of the baser metals. If, accordingly, the doubtful point that alluvial gold is generally finer than reef gold be conceded, there is here a very evident explanation of why this must be the case, even if they are both derived from the same source.

There is one reason that seems to make any other explanation than the one here given of the origin of nuggets all but impossible of acceptance, and that is the shape of the gold. Rounded lumps and flattened scales are exactly what we should expect if the gold were produced by the disintegration of reefs, and the subsequent attrition of the gold, together with pebbles of harder rocks in the bed of a stream. If, however, the gold were deposited chemically in the gravel, it would necessarily be crystalline. A nugget is often found consisting partly of quartz and partly of gold, well rounded, but with the gold slightly hollowed, so to speak, leaving the quartzose parts protuberant; this is evidently because the complex pebble of gold and quartz has been ground round in the bed of the stream, and the gold being softer, though tougher, has been worn away more rapidly than the harder quartz. If, on the other hand, the gold had been chemically deposited, or if the nugget had grown after the gravel bed had been formed, we should find the gold projecting beyond the surface of the quartz, and this is never the case.

The above arguments are, to our minds, conclusive, but we may add one more that will, no doubt, tell with some of our readers. A prospector who is looking for reefs is guided solely and absolutely by the above arguments. He pans the gravel of streams till he gets colour; then he works up the stream as he finds the gold get coarser until he no longer can get any gold in the gravel. Here he commences to trench for his reef, and it is by such a system of prospecting that very numerous reefs have been and are being found. An ounce of fact is said to be worth a pound of theory, and when, as here, we have both pointing in the same direction, we are fairly warranted in considering it to be the right one.

## THE GOLD MINING REVIVAL IN BRITISH COLUMBIA.

**B**RITISH COLUMBIA, as was expected in many well-informed quarters, has at length come definitely and decidedly to the front as a gold mining country. After a long period of unmerited neglect, the whole district has begun to resound with preparation, and every hill is covered with its knot of prospectors, anxious to be early in the race. Time was—and not so very long ago—when a sanguine pronouncement as to the future in store for British Columbia as a gold-producing country was met with scornful incredulity; and one good friend of the field relates that, when speaking before a London audience in 1893 upon the resources of the colony, he met with the rejoinder that "when Kootenay began to ship, London would listen to her, and English capital would flow to her assistance." Kootenay has long since been shipping, and if one-tenth of the reports to hand from Western Canada are not inventions—as it would be folly to suppose them to be—then there is a career before that country which might be envied by many a more widely advertised, but less intrinsically valuable, district. The sceptics have at last been silenced, and people generally are beginning to feel that a district which, like Kootenay, produced ore valued at £350,000 for the second three months of last year, at a time, moreover, when it was by no means enjoying the full favour of the English capitalist, is rather to be exploited, than contemptuously rejected as unworthy of consideration. In proportion as serious attempts are

being made to get *en rapport* with the mineral contents of the country, the descriptions founded on prospecting and exploratory works are becoming more and more enthusiastic. Well tried districts, like Slocan and Trail in Kootenay itself, with the famous Le Roi Mine as the premier enterprise, already famed for its actual achievements, and Cariboo, now justly celebrated for its placer mining, are, it is confidently stated, merely the elementary beginnings of an industry in a colony which abounds in minerals from border to border. Scarcely a day passes now without a valuable addition being made to the discoveries hitherto chronicled in connection with the better known parts of British Columbia. Reports of these successive finds more often than not are accompanied with the tangible evidence of specimens of some extraordinarily rich stone which have been dug out in more than one locality that was hitherto only half suspected of bearing gold. Nor is there any reason to suppose that the deposits thus brought to light are mere Londonderry-like patches, phenomenal in character while they last, but soon giving out when worked with method and energy. There are in fact, circumstances peculiar to the country which give quite different complexion to the case. Ore at surface is not, in the majority of cases, found to equal anything like the ore gained at depth. Some of the most successful and noteworthy workings which have been carried on in the country go to show that the ore steadily increases in value as depth is attained, and that is not only true of one particular district—more especially of West Kootenay—but of the province at large. This was particularly the case with Trail Creek, where the ore definitely rises in grade the further it is attacked below the surface. There is thus not much ground for the apprehension—even if other evidence of a no less convincing character were left out of account—that the revival in British Columbian mining has anything in common with those momentary flashes of prosperity which visit even the poorest and most disappointing of territories. For the present the industry in some of the outlying portions of the country is in some degree hampered by the want of railway communication—a want which has in the past 40 years, measuring the history of mining in the province, played a large and unfortunate part in its career. Generally speaking, the province is now admirably served, so far as internal communication is concerned, by the Canadian Pacific Railway, supplemented by a number of smaller branch lines, built to meet the needs of the different localities as they have arisen, and which form in themselves a not insignificant service of inter-communication. These, it is expected, will be largely added to in the immediate future, since the needs of the country will, no doubt, be considerably expanded by the vigorous and flourishing growth of mining activity which is now confidently anticipated. There is, for instance, a project afoot in London now, for the joining of Boundary with Trail by a railroad which will enable the ore dug out in the former district to be treated by the home smelters, instead of, as is now generally the case, being sent southward to Butte, Helena, or Salt Lake City. There is naturally every reason why the smelting of Canadian ores should be done on Canadian soil, so that all the benefits of employment and activity which may accrue in connection with this particular branch of industry may be enjoyed by British subjects, and not sent over the Southern border into the United States. Already there is a smelter with a capacity of 250 tons per diem in full blast at Nelson, and plans for the construction of several others are being formulated, so that in the not far distant future Canada will have a large smelting industry, to expand and increase side by side with the growth of that branch of industrial activity—mining—on which it ultimately depends. The perfection of the system of railway communication in the province removes the greatest obstacle barring the way of progress, and this, joined to a large number of seemingly sensational, but also apparently verifiable discoveries, has given rise to the mining revival which is now involving the whole province, much to the delight of the colonists themselves, who have been waiting patiently through long years of gloomy stagnation for the attention and favour of outside capitalists. They are, in fact, in their jubilation, somewhat prone to the use of superlative language. Thus, we find Mr. P. A. O'FARRELL, a mining expert of mark, and even of eminence over the water, speaking to an interviewer of Rossland as "the most wonderful mining camp" that he has ever seen, notwithstanding that his experience includes such celebrated mining centres as Bendigo and Ballarat. In support of this view, Mr. O'FARRELL cites the progress of Rossland from a few log cabins to the full status of a city—an evolution accomplished, we should say in the record time of 18 months. From sanguine statement, Mr. O'FARRELL goes on to sanguine statement. After avowing his expectation that British Columbia will "rapidly forge ahead until that province becomes the largest producer of silver, gold, and lead in the world," he speaks of the "fabulous wealth" latent in the Trail district, which, energetically and properly developed, will, of course, lead to fabulous returns upon the money devoted to its exploitation. In giving value to these utterances, it should be remembered that they are not the irresponsible rhapsodies of a neophyte, but presumably the well-considered reflections of a man of expert knowledge and wide experience. Nor is this laudation a single or isolated instance of the kind. There is remarkable accord amongst those who have examined Kootenay and other adjacent fields as to their remarkable mineral value, not only in regard to the precious metals, but also as to copper and other deposits of the baser sort, though, as might have been anticipated, the most eager attention is reserved for gold. It is very much to be regretted that English capitalists did not turn their attention earlier to this promising country, for their dilatoriness in this respect, despite the appeals which were made to them both in the London and Colonial Press, and the authoritative statements as to actual mining achievements with which they were accompanied—has enabled the Americans to get in first, and to take their pick of the enterprises available for acquisition. This

energetic race has fully profited by their immunity from competition, and are now in possession of some highly promising ventures which they are putting into working order, with all the accustomed vigour of the New Englander. It is now abundantly evident, however, that they are not to have a free field in this matter any longer, for the representatives of English companies are now travelling in the provinces, seeking profitable outlets for the investment of capital. Even in City circles, where sensations other than those affecting the rise and fall of well-established share markets are not wont to travel very quickly, or to assume large proportions, the movement in favour of British Columbian enterprise has been quick and decided. Kootenay is the theme of conversation in City offices, and the mark upon which mining engineers in embryo are beginning to bestow an interested attention. It is even said that the great Mr. BARNATO has arranged for representation in the province, and where Mr. BARNATO goes other people are sure to follow. There are, it is said, a large number of British Columbian companies on the point of flotation. The colonists, then, may congratulate themselves upon the fact that the long-awaited time of mining revival in their midst has at last arrived, and no doubt they will do their best to make hay, in conjunction with the British investor, while the sun of industrial prosperity continues to shine. But a word of caution to those who are most prominently associated with mining in the provinces might not be out of place. The colonists have now, to a large extent, their future in their own hands. If any appreciable number of the reports coming to hand by every mail of rich discoveries and wide deposits are true, they can, by steady and sober development, ensure for British Columbia a permanent and honourable position among the best gold mining districts of the world. There is, however, another alternative which we hope will be carefully and rigorously avoided. Everybody who has followed with attention the growth of industrial activity under the genial and expansive influence of general commercial prosperity, and who has noted the inevitable reaction which takes place when the popular attitude becomes somewhat more confident, will have noted that the measure of reaction is invariably the measure of the senseless inflation which has marked the origin, the rise, and progress of the boom, as it is called, which preceded. It is open to the Canadians to ward off anything like a severe reaction against the present phenomenal activity, by resolutely setting their faces against wild-cat schemes and the puffing which is necessary to make them marketable, by taking care that sober and experienced men are chosen to act as the mouth-pieces of the colony, and by pursuing their mining operations in a steady and methodical manner, and in full concordance with the rules of the best mining practice.

## THE WEST AUSTRALIAN GOLD CONCESSIONS.

A COMPANY which has achieved a success that is striking and beyond the ordinary, even amongst the peculiarly successful development companies now operating in West Australia, is the West Australian Gold Concessions (Limited), whose annual meeting was held on Thursday last at Winchester House. The statement of affairs then presented from the chair was of so satisfactory a character that even the most exacting proprietary could hardly have found fault with it. It appears from the brief and succinct statement of accounts circulated in the meeting room, that for the year terminating in December last, the company has realised a profit of over £57,000—an amount which was equal to about 100 per cent. on the total capital of the company issued to that date. This total of profit in itself may appear moderate enough when contrasted with the heavily-weighted exchequers of some of the more prominent companies engaged in a parallel work in the Australian colonies; but it acquires additional point and importance from its relation to the capitalisation upon which it was realised. Shareholders cannot but be satisfied with their holding in a company whose operations are so remarkably successful as to render possible after one year's operations the return of the whole of the money originally invested, and that, briefly put, is the sum and substance of the situation with regard to the West Australian Gold Concessions. The prosperity of a company of this particular character depends in a large measure upon two factors—one a moderate capitalisation, and the other economical working. From this fact alone it can be safely inferred that the inception of the company was carried out upon a sound and business-like basis, and that its present working is in the hands of an able and efficient administration. The future of the company obviously lies with the successful development and subsequent flotation of a crowd of more or less promising properties, which they have been able, without detriment to their financial position, to mark out for themselves in Western Australia. In this connection, the most roseate expectations are associated with the "Princess Royal" at Cue, and the "Ajax" at Black Flag. With regard to the first of these properties, the early expectations of its value have received subsequent confirmation, and substantial crushings have figured out at the very satisfactory average value of 2 ounces to the ton. Of the Ajax, the directors appear to be even more sanguine, one reef having been cut measuring 2½ feet across, and assaying for a distance of 20 feet about 2 ounces to the ton, while a second reef, slightly narrower in breadth, gives the even more appetising figure of 3 ounces to the ton. So far as this last property is concerned, the water difficulty would appear to have no existence, for water has already been struck in the mine. Notwithstanding that it is very often the fact that the ultimate career of a developing company is not altogether of a piece with its earlier years, it is difficult to avoid the reflection that if the management of the West Australian Concessions continue to mould their policy upon the lines which have hitherto characterised it, the shareholders will have every reason to congratulate themselves upon their association with, and their holding in, an enterprise which has fully earned the right to inclusion amongst the most successful of West Australian ventures.

### NATIVE LABOUR ON THE RAND.

Just at the present moment there are several considerations afloat affecting the all-important question of the efficiency of the native labour in the South African mines. The two main points are, of course, the proposed reduction of wages, and the measures which are being taken to decrease, almost to vanishing point, the quantity of spirituous liquor which the Kaffirs, prone to the vices, but almost unaffected by the influences, of a grade of life higher than their own, consume so abundantly, and so much to their own detriment of body and working capacity. No doubt some sentimental theorists might be inclined to formulate objections against the prohibition on the ground of the liberty of the individual. But experience abundantly proves that in Government, a wide distinction must be made between those peoples who are able to use their liberty well, and others to whom liberty of action leads with an almost fatalistic certainty to vice, and to consequent ruin. It is a mere truism that the native labour on the Rand has been seriously diminished in capacity by the alcoholic habit, which, more readily and easily than the higher attributes of civilisation, the Kaffirs have eagerly taken from their white conquerors; and it must follow, therefore, that the closing of the canteens will affect a much-needed improvement in this regard. There are few managers who will not readily admit that during the short period when a similar method of prohibition was tentatively applied, the Kaffirs were much better workmen, and much more given to order and discipline, than at other times when they were able to have recourse to one of the two humorously-named influences of European advancement—to wit, the brandy bottle and the bayonet. The mining industry depends, as everyone knows, on the ability to command the resources of a large native labour market, and on this account the measures of the Transvaal Government for the suppression of the liquor traffic stand out as of great importance. Not, perhaps, equally vital, with the foregoing question, but still momentous in its way, is the decision lately taken by many of the mine managers, to effect some not inconsiderable reduction in the wages paid to the Kaffirs. There is said to be some prospect of trouble in this matter, since a large section of the natives, starving though many of them are, have been credited with the intention of striking rather than submitting to the reduction which is threatened. But it must be obvious, if the mine managers are united in this matter, and if they concordantly insist upon revising the scale of payment at present in vogue, that there will be no ability on the part of the "boys" to resist the innovation which is forced upon them with all the weight of white authority. Hitherto, great difficulty has been experienced in the attempt to bring the mine managers into line with regard to this question. There have been some managers whose zeal for the interests of the companies which they serve has permitted them to outbid their colleagues in the labour market, and the unfortunate competition which has resulted from this step has forced the wages' rate up to an artificial height, which would certainly not have been attained had matters taken their natural course. The crucial importance of the labour question leads us to hope in the first place that a total drink prohibition may be successfully carried into effect, and in the second that the wage difficulty, of which we in England have had so long and so unfortunate an experience, may be finally and satisfactorily solved at an early date.

### THE PROPOSED OIL COMBINATION.

The nice little family arrangement by which the Standard Oil Company of America and the syndicate of Russian oil producers sought to map out the consuming areas of the globe for their own exclusive interest seems to be in some little danger of being exploded. Speaking broadly, the leading commercial classes of civilised nations do not bear any good will towards cornering arrangements of this description, and already people are beginning to revolve measures for protecting the consumers of so important a trade product from the direful results that would accrue from a successful attempt to dominate the markets of the world. In the forefront of the opposition we have to count the German Government, who certainly have the reputation of being able to make themselves felt in any direction that catches their attention and stimulates their energy. But, beyond this, it is obvious that there will be other more unofficial, but hardly less effective, attempts to prevent the manufacturers from falling under the thumb of this nice little knot of monopolists. It is, of course, the fact that the two greatest producing fields of the world—the United States and Russia, to wit—are well under the control of the parties to the combination in question, but there is no need for us to inform our readers that there are many other subsidiary, but by no means unimportant, oil fields in the world, that will certainly become well worthy the attention of capitalists if the petroleum prices rise to any such dizzy heights as would seem to be foreshadowed by the intentions of the company on the one hand and the syndicate on the other. It would be futile to attempt an enumeration of the various countries where promising oil fields have been discovered, but we may remind our readers of the vivid and interesting account of the Indian oil fields which was lately given by a high Government official before one of the leading Imperialist Societies in London. The opinion which Mr. OLDHAM, the official in question, then expressed, that India would never be able to vie as a petroleum producer with the Russian industry, is no doubt a disappointing factor in the problem, but there is no reason to suppose that the combined outputs of India and other such fields as Eastern Austria and Peru would not be able seriously to hamper the action of the monopolists, and prevent them from attaining to a complete control of the total production of the world. Artificial interferences with the working of the laws of supply and demand are necessarily very hazardous undertakings, and there are few things in a commercial regard more brittle than a ring of the sort which the American and Russian monopolists are

attempting to form. While we are not over anxious as to the results of their efforts—deeming it in the highest degree improbable that they will find themselves able to subserve their own interests at the expense of the commercial community at large in the manner they desire—there is some reason to hope that the attempted ring may be productive of considerable benefit to the oil industry by stimulating competition, and by thoroughly opening up oil-producing districts which are now suffered to lie idle, owing either to a want of capital or a want of enterprise.

### PACIFYING RHODESIA.

THE hope, generally expressed a short while ago, that finality would soon be given to the troubles in Rhodesia seems likely to be fulfilled in the near future. The latest advices from that newly-conquered country are to the effect that the rebels, fearful alike of continuing the struggle that has long been hopeless, and of surrendering to men whose respect and goodwill they have forfeited by outrage and crime, perpetrated in defiance of the laws and customs modifying and regulating war in civilised countries, are making overtures for peace, so that there should not be reason much longer for us to regret that territories so rich in mineral wealth and so likely to form the settling ground for a large and prosperous community should be retarded in their development by unfortunate embroilments with the original settlers upon the soil. By pluckily venturing unarmed, and almost alone, into the chief rebel stronghold, Mr. CECIL RHODES was enabled to conclude a general agreement for the cessation of hostilities, and it was fitting that a man who has been so long and honourably connected with the country which bears his name, should by circumstances and character be placed in a position to take so important a step towards the conclusion of a peace. Those shortsighted and pre-judiced people, whose attachment to the little England party is wont to warp their views of men and events, and who were roundly prophesying that the career of Mr. RHODES as a politician had reached its end, will find now, to their disappointment, that they did not make sufficient allowance for that high capacity for government and action which Mr. RHODES possesses in so eminent a degree. This last signal service which the statesman in question has rendered to the empire at large, and more particularly to that portion with which he has been, from the first, most closely associated, will serve to disabuse the public mind of the error that the South African situation can be gauged without making due allowance for the political personality of Mr. CECIL RHODES. Those interested in the development of Rhodesia will eagerly welcome the re-establishment of peace in that promising colony, the mineralogical wealth of which has been tested over and over again upon the highest authority. Much has yet to be done before the wealth that undoubtedly lies latent within Rhodesian territories can be turned to account, and all efforts towards the provision of means of communication and other necessary factors in industrial expansion were necessarily brought to a complete standstill by the sudden and unexpected revolt of the Matabele. The rebellion once crushed, however, the local administrators may be trusted to take such effective measures as will prevent the possibility of its recurrence, and Rhodesia will then be at liberty to advance on that broad line of agricultural and industrial prosperity which has been marked out for her by the wisest and most far-seeing judges of events.

### SUGGESTED REFORM IN WEST AUSTRALIAN MINING REGULATIONS.

THE mining regulations with regard to prospectors in Western Australia are at present engaging the serious attention of the Chamber of Mines and Commerce, and at the next meeting a resolution will be proposed asking the Minister of Mines to introduce a clause into the Mining Act whereby the *bona fide* prospector will be placed in a different position from wealthy companies and syndicates. In Western Australia only one *bona fide* prospector on each line of reef enjoys any special privileges. Immediately a claim is pegged out it is essential in addition to paying rent to employ a man on every 6 acres, while the number must be doubled when the lease is approved of. Under these circumstances two men taking up 24 acres have at once to spend about £8 a week on labour, with the result that their capital is gone before there is any likelihood of any reward being obtained for their trouble. Such heavy responsibilities are the cause of several areas, which the prospector could have himself sufficiently developed to make the property marketable, being left practically untouched, and, in consequence, a large extent of auriferous ground is allowed to remain dormant, when, under more favourable conditions, it might soon have been brought into profitable use. But a far greater hardship to the prospector is the fact that the labour requirements necessitate his disposal of the lease at the earliest possible date. He cannot afford to hold the lease long enough to secure by any means a fair price for the claims, and, perhaps, a property he gets a few hundreds for is ultimately floated on the London market for several thousands. No doubt a high price is obtained from the public, but the unfortunate prospectors fare very badly. In face of these circumstances it must be admitted by all that the present movement on the part of the Chamber of Mines deserves every success. If the law regarding prospectors' claims were assimilated to that now applicable to protection areas in districts not proclaimed gold fields, two prospectors taking a claim of 24 acres would be able, on payment of the rent of £1 per acre per annum, and the survey fees, to expend only their own labour on the same as long as they pleased. Naturally the condition would be attached that as soon as the claim passed into the hands of a syndicate or company the usual labour requirements would have to be fulfilled. Again, prospectors who are the servants of a syndicate or company would, of course, not stand on the same footing as independent gold seekers. In this part of the proposal the objection might be raised that it would be a difficult matter to divide the pro-

spects into the two sections indicated, but if the penalty for misrepresentation was fixed at liability to the instant forfeiture of the lease, we venture to think there would be very few who would be willing to run such a risk. It is by no means a certainty that the Minister of Mines will adopt the lines here laid down, but even if the present labour conditions were reduced by half of the obligations being cancelled in the case of *bona fide* prospectors, an immense amount of good would be effected.

### THE ETHICS OF MINING BOOMS.

THERE is just now a disposition in many quarters—probably induced by the somewhat inflated atmosphere of mining revival which is now surrounding us—to go tangentially off into abstract speculation as to the ethics of mining booms. A well-known Australian speaker, who has earned the right of placing the public in possession of his views, by an experience commanding no fewer than four such financial phenomena, lately addressed a large assemblage at Adelaide on this question, and did not hesitate to speak in very pointed and uncompromising language as to the methods by which he supposed such public movements to be originated and sustained. He even went the length of citing the definition of a company promoter as "a man who promotes his own fortune by getting yours"—a *bon mot* that is recommended rather more by its humour than by any rigid fidelity to the fact. While it is undoubtedly true that the undercurrent of mining speculation or investment have frequently given rise to actions of a more or less questionable character, it would be unjust to suppose that dealings of this description form the bulk or even a considerable proportion of the elements that go to make a genuine gold mining boom. Given a really valuable stretch of gold-bearing country, and a fair habit of discrimination on the part of the public at large—without which nobody clothed in his right mind would dream of dabbling in mining ventures—there is no reason why a strong current of popular favour should not react, as well beneficially upon the investors themselves as upon the country in which the mining operations are carried on, to the encouragement of trade and the promotion of a healthy business activity. The generous judgment which might have saved Gomorrah from flames seems to be systematically reversed in these days, and people are a great deal too readily prone to condemn a class or a movement because of the doubtful deportment of a few individuals. The sooner it is recognised that dealings leaving something to be desired in the point of uprightness really rebound disastrously upon the heads of the individuals who perpetrate them, and the community in which they take place, the shorter will be the periods of stagnation affecting the general industrial spirit, and the more solid and enduring will be the measure of prosperity attained by the different gold fields, colonial and other.

### COMPANY FINANCE.

Reports, Balance Sheets, Dividends, &c., of Mining and other Companies.

**MOUNT MORGAN GOLD MINING COMPANY (LIMITED).** The directors' report, presented to the shareholders at the general meeting, held on Tuesday, July 28 last at Rockhampton, contains the following passage:—"As usual, the statement of accounts for the first six months of our year was laid before you in December; this is now supplemented by the accounts for the second six months, certified as correct by the auditors, with a summary of the two statements. Comparing the totals with last year, an increase in the expenditure of over £40,000, irrespective of £6154 5s. for royalty, will be noticed. The drought and then the floods caused an increase in both material and labour, and the increased number of tons of ore treated has of course created additional expense. It will be noticed that the royalty has eaten up 1500 ounces of gold. The new works show a cost of £27,497 14s. 10d., but of this £8305 12s. is for machinery, &c., for the second and following sections, and £3962 11s. 8d. for tramways and roads, leaving £15,229 11s. 2d. to be charged to the first section. On the other side we have an increase of over 17,000 ounces of gold, which has enabled us to increase our balance by £3612 12s. 5d., in addition to laying the foundation of a bullion reserve with 2862 ounces 1 dwt. gold, valued at £11,734 8s. 1d."

The directors of the ANGLO-MEXICAN MINING COMPANY (LIMITED) have declared an interim dividend of 1s. per share, free of income tax, payable on August 27, at the company's bankers, Messrs. Glyn, Mills, Currie, and Co., 67, Lombard-street, E.C., to all shareholders registered at this date.

The secretary of the WAIHI GOLD MINING COMPANY (LIMITED) gives notice that the usual quarterly dividend at the rate of 2s. per share, free of income tax, will be paid on September 15, and the warrants for same will be posted on September 14. The transfer books will be closed from September 7 to 14 inclusive for the preparation of the dividend warrants.

The LEICESTER DIAMOND MINING COMPANY (LIMITED) notify that the amalgamation of that company with the Leicester Consolidated Mines (Limited), has been carried through, and that the London transfer books will be closed on September 8, after which date transfers cannot be accepted.

Messrs. Robert Whyte and Co., 19, Bury-street, St. Mary Axe, E.C., the London agents of the WITWATERSTAND GOLD MINING COMPANY (LIMITED) (KNIGHT'S), notify that on and after September 2 next certificates for shares in the new issue of the company will be ready for distribution to shareholders in exchange for the receipts which they now hold.

**"COST-BOOK" ADVERTISING.**—We have received from Messrs. J. T. Seguris (Limited), of Gresham House, E.C., the publishers, an interesting little pamphlet on "Cost-book" advertising, which may advantageously be read by those courting publicity for any department of commercial enterprise. The pamphlet goes broadly into the question of advertising in general, but reserves a special notice for new department in the art, which is called the "Cost-book" system, and which is described by the writer of the pamphlet as "nothing more or less than the transaction of the clients' business in all its various details and aspects on 'bed-rock' prices." Where the agent's profit comes in is not exactly specified, but probably a liberal, but by no means unfair, commission would be allowed him by the particular newspaper organ in which the advertisements are inserted. The pamphlet is neatly got up, and is interesting reading.

**MONASTERY DIAMOND.**—A cable received 26th inst. states: "362 loads yielded 36 carats."

## THE MINING MARKET.

FRIDAY EVENING.

Renewed advance in South African Shares followed by a smart reaction.—A good tone maintained which extended to West Australian properties.—The settlement.

MORE business has certainly been concluded among mining shares generally, and, as compared with Friday last, prices show a sensible, if only partial improvement. South Africans until Wednesday morning, almost monopolised attention, but exterior influences which subsequently dominated almost all markets, checked what might have proved a "boomlet," and, consequently, quotations are noticeably below what they were. The public has bought speciilities while Glasgow and the Cape have been less discriminative in their support, but until this afternoon Paris selling has been apparent daily. As will thus be seen, the market has been subject to diverse influences, which considering the somewhat premature character of the rise and that realisation of profits by operators desirous of taking holidays almost immediately followed, might have diminished instead of increasing confidence, as the net result would seem to have produced. We have said that any really important recovery might be postponed until next month, or perhaps October; thus far this remark has been confirmed, and although the big firms are probably identified with the elasticity shown, confirmation is not lacking that those controlling the market will take steps to prevent a too rapid recovery. Local conditions are distinctly favourable, and the collapse of the insurrection in Matabeleland, and the expressed determination to proceed with the Bulawayo Railway also have a bearing upon future developments which the public will be wise in appreciating, nor should the undoubted claims of such good West Australian, or New Zealand, or Indian gold mines, standing at low prices, be ignored, for when quotations do properly move, the expansion will, probably, be general. On Saturday business was at a standstill with Kaffirs steady and a firm tone in Indians, while the week was commenced with a small all-round advance in South Africans, Rhodesian enterprises being well to the front. The preliminary arrangements of the settlement on Tuesday rather encouraged the upward tendency, for Chartered touched 3½, although a contango of 3d. or 4d. per share was imposed to carry over until September 16. For De Beers 1s. 6d. to 2s. was required, while the average rate of continuation was increased to 8 or 10 per cent. West Australians were renewed at 12 and 15 per cent., but the latter were steady, despite a reaction elsewhere, and "Kangaroos," moreover, held their own on Wednesday, though other mines declined, chiefly on considerations remote from mining. South Africans were flat throughout yesterday, particularly African Estates at 1½; and while the projected combination between the Johannesburg Investment and Barnato "Banks" was freely discussed, some pointed remarks were made in the market respecting the affairs of the Orion, Glencairn cum Glenluce, and Langlaagte Royal companies, but investors interested should not permit themselves to be misled by anonymous communications. A dull and irregular tone prevailed to-day. Final prices were firm, however, Barnato Banks being 2½ to 3½, ditto Consolidated 2½ to 3, Chartered 3½, Kleinfontein Gold at 3½, and Lisbon-Berlyn at 7s. 9d. were minor features of strength.

## South Africans, &amp;c.

Day by day prices show a substantial increment taken all in all, and Kaffirs are shorn of none of their strength. At the end of last week dealers manifested a disposition to remain satisfied with the results they had so far achieved during the present account. The market was quiet on Saturday with a drop in Heriots to 9½. Modderfontein left off easiest at 7½, while Simmer and Jack rose to 6½, and Village Main Reefs were firm at 6. East Rands were steady and ½ up at 7½, and Knights strengthened to 7½. Modderfontein "B" improved to 2½ on Paris buying, and Randfontein hardened to 3; there were also small gains in Langlaagte Royal, Goldenhuis Estate, and Ginsberg. In the cheaper descriptions, Barret at 15s. 6d. and Lisbon Berlyn at 7s. 3d. showed some improvement. De Beers were strong at 30½. In Land and Explorations, Chartered closed a trifle higher at 3½, Transvaal Exploring improved to 2½. There was a fall of ½ in South African Gold Trust, Anglo French, and Willoughby Consols; there was also a slight relapse in Barnato Banks and Consols at the close. The West Australian market was without any feature of interest, and prices drooped generally; weakness became apparent in Lady Shenton, which dropped ½ to 2½. Lady Loch and Kalgoorlie too were easier. Hannan's Brownhill fell to 6½, and Hampton Plains to 4½. There was a noticeable enquiry for Gold Estates and Wealth of Nations, while Broken Hills Proprietary's improved to 40s. 6d. on the news being received of an improved output for the last four weeks. Rio Tintos and Anacondas closed ½ down. During Monday we note that a tendency was displayed to reduce "bear" commitments, and the improvement in Kaffirs was very marked, and one cannot be surprised that there should be a tendency displayed to secure profits. On Monday the sharp upward movement in the Kaffirs surprised many people, but the result could be easily anticipated, and the cause was not far to seek. Since last account the market had been gradually picking up, and a large number of shares had passed into strong hands, and many important Cape firms have recently absorbed these stocks, in addition to which the latest news from South Africa is of a distinctly encouraging nature, and Transvaal affairs are apparently more settled, which means that the supply of native labour at the mines is becoming abundant, and the cost will be lessened. The bulk of the business was in Chartered, De Beers, Consolidated Goldfields and East Rands. The greater rise was in Rand-Mines—from 3½ to 3½, and there was a noticeable activity in East Rands. The only decline in Gold shares was observed in New Primrose, which eased off. De Beers were ½ up at 30½. Jagersfontein fell ½. Chartered rose to 3½, on receipt of cable announcing the surrender in the Matopo Hills, but the Detectors still languished at 9½. Rhodesia Exploration were up 1 to 7½. The Australian Market sympathised with the buoyant tendency of Kaffirs, and business was larger than at any time during the past week. West Australian Gold Fields lost ½ to 9, and Lake View Consols dropped to 8½. Lady Shenton strengthened to 2½, on the receipt of favourable advices. North Boulder hardened to 1½. In Miscellaneous, dealings were confined to Indians and New Zealand. There was a slight demand for Rio Tintos, which improved to 22½. On Tuesday, contangos were higher, but the difference was only a trifle, and the fact that the account that is now being entered upon is of 19 days' duration, compared with one of 15 which is now closing, must not be overlooked. The knowledge that £2,000,000 in gold was going to America, and the proba-

bility for money becoming dearer failed to disturb operators. During the past two weeks Rand mines have risen £3, Rhodesia Exploration 2½, Consolidated Gold Fields and Modders 2½ each. Knights "make up" 1½ higher than before. East Rand 1½ De Beers 1½, Henry Nourse 1, while Chartered, Anglo-French, Aladdin, and Matabele Reef gained ½ each. Buying orders predominated, and although there was a lull at noon, prices hardened again in the afternoon. The advance in Buffelsdoorn Consols was due to the fact that the company possess 750 claims in the Potchefstroom district, and accounts show cash balance of £57,600. East Rands showed particular activity, moving from 7½ to 8½, but eventually they closed at 8. In Diamond shares, Jagersfontein rose ½ to 10½ Colenbrander were much in request, and dealing was induced by publication of a statement that the company will receive large concessions in consideration of Mr. Colenbrander's valuable services on behalf of Chartered. Australian shares showed a tendency to harden. Great Boulders were in demand, and rose ½ to 7½. Indian shares showed some activity. On Wednesday Kaffirs opened firm, and Paris came into the market a seller. The chief feature of the market was the recovery in Bantjes, which rose ½ to 4½. The Continent sold East Rands, Randfontein, and Consolidated Gold Fields. The first of these closed a little down. Modders finished a turn lower on the decision of the company to issue some reserve shares being announced. There was a brisk business in Rhodesian shares, with the exception of Chartered, which were weaker. Business in Australians was slack. Associated left off firm, however, at 3½ on the receipt of news that an ore body dollying 2 ounces per ton had been struck in the Australia mine. The receipt of satisfactory news caused a rise in North Boulders; Bayley's Reward lost 6d. at 5s. on news of a partial clean up of 298 ounces. Indians displayed a firm tendency, and Invicta left off at 1 on the issue of a satisfactory circular by the directors. In Copper shares Rio Tintos were easier at the end of the week. Kaffirs suffered a general set back, but final prices were a little above the lowest. Rand Mines fell ½, Modders ½, East Rand ½, Consolidated Goldfields ½, Randfontein, Van Ryn, and Primrose New ½, Rio Tinto declined ½, and Chartered, Barnato Bank, Consolidated Buffelsdoorn, and Randfontein ½, while Great Boulder rose ½. In South African the prices on the week show a general advance. In Barnato stocks Consols are a turn better at 2½, Buffelsdoorn ½ up at 3½, Johannesburg Investment at 3½, have gained ½, and Johannesburg Water at 2½ and Langlaagte Royal at 2½ are ½ higher. Oresus, Ginsberg, Spes Bona, May Consols, and New Primrose show no improvement, while Kimberley Roodepoort at 2½, and Rietfontein at 3½ are each ½ lower. The Robinson Stocks show an improvement. Langlaagte Block B at 1½, Randfontein at 3½, and North at 2½, are a fraction higher. Among the deep levels, there has been a fall in Consolidated Deep Levels at 5, Angelo at 5, and Rand Mines at 31. East Rand at 7½ are ½ dearer, and Nigel Deep at 1½ are up ½. Goldenhuis Deep and Roodeport Deep are unchanged. In the Eckstein group there has been a rise in City and Suburban at 5½, Henry Nourse at 7½, Heriot at 9½, Jumbers at 7½, Simmer and Jack at 6½, and Wemmers at 9½. Bantjes have gained ½ at 3½, Durban Roodepoort ½ at 7½, Johannesburg Gold 1s. 6d. at 8s. 6d., Kleinfontein ½ at 3½, Knights ½ at 7½, Meyer and Charlton at 6, Orion at 12, Eastleigh at 1, and Crown Reef at 1½ are unimproved, while Luipaards Vlei has lost ½ at 2½. Tati Concessions and Transvaal Gold are the turn better, Sheba has gained a fraction, and Van Ryn, Village Main Reef, Vogelstruis, and Steyn Estate are unaltered. In Land and Explorations, Chartered are ½ up at 3½, Bechuanaland ½ higher at 1½, Goldfields Deep ½ dearer at 11½, African Estates are ½ flat at 1½, Rhodesia Limited at 1½ and Exploring at 7½ are each ½ higher. Oceana at 1½, Mozambique at 1½, New African at 3½ and Alexandra at ½ are the better by a fraction. Zambezia Willoughby Consols, and Rand Exploration show no improvement on last week's prices. Potchefstroom at ½ are ½ up. In Diamond shares, De Beers at 30 are the same as they were. Jagersfontein at 10½ are ½ higher. In the small Lydenburg group Balkis Land are firm at 6s. 3d., Barret at 16s., and Lisbon-Berlyn at 7s. 6d. Graskop shows no change. Copper shares are dull; slight movements have taken place during the week, but prices have gone back to their old quotation.

## West Australians.

The West Australian properties, which have shown an undertone of firmness during the week, have undergone comparatively little alteration in prices. Hampton Plains are stronger at 4½, and Arrow Brownhill are, on the other hand, flatter at 1½, but North Boulder show a slight recovery at 1½. Hannan's North have strengthened to 1½, Oroya to 1½, and West Australian Gold Fields to 9½. Lady Loch has lost a fraction at 3½, and Lake View Consols at 8½, but Mount Margaret improved to 2, and Ivanhoe are maintained. The Menzies group show no alteration on the week, and the White Feather group is unchanged. The Associated group is quiet, Gold Mines being 3½, but Great Boulder recovered to 7½, as a dividend of 5s. is announced.

## Miscellaneous.

Indians have developed a firm tone, Nundydroog being strong at 3½, also Oregams at the same price, which is 7s. 6d. up on the week, and Coromandel have improved to about 2½. New Zealand shares have been occasionally in request, but Kathleen are flat at 4s. or under, Hauraki, Kapanga, &c., show no improvement on their old prices, but Waihi rose ½ to 7, and Waihi Silverton advanced to 2½. St. John del Rey are firm at 1½, New Chums flatter at 7s. 6d., and Aladdins show an improvement at 2½ on dividend rumours of 10 per cent. The Alaskan properties are practically unaltered, but Hall Mines (of British Columbia) have further declined, being to-night barely 2½. Mount Lyell hardened to 8½—9, and Mount Morgan were firm at 3½—4, inasmuch as this company, during the past 12 months, expended over £40,000 more than in the previous year; yet £300,000 was distributed to the shareholders, and a bullion reserve created, valued at nearly £12,000. Copper mines are easier on French settling. Rio Tinto falling to 22½ or 23½, Anaconda to 6½, and Namaqua to 1½; final quotations are not, however, quite the lowest.

STOCK EXCHANGE SETTLING DAYS.  
CONSOLS.

Tuesday, September 1.

MINING MAKING-UP DAYS:  
Saturday, September 12. | Saturday, September 26.  
MINING NAME DAYS:  
Monday, September 14. | Monday, September 28.  
ACCOUNT DAYS:  
Wednesday, September 16. | Wednesday, September 30.

MESSRS. BARRY, HEAD, AND CO'S WEEKLY REPORT.—Demand for finished iron and steel continues good, while shipments and consumption of pig iron remain unusually brisk. Finished prices are steady to stiff, as last reported, while rigs are 6d. up on the week; and, taken all round, the outlook for the near future is most encouraging.

## THE METAL MARKETS.

THE METAL MARKET, LONDON, AUGUST 28.

## Copper.

WING to the lower American prices, to the unsatisfactory financial advices from there and to the weakness on the London Stock Exchange, G.M.B.'s have declined in value this week, with large transactions taking place, not only in G.M.B.'s but in all sorts of consumers' copper, American as well as European, the tone at the close being much steadier, especially for consumers' copper, of which only moderate quantities are now offering and at prices rather above the lowest touched. On Monday cash was done at £47 8s. 9d. and £47 10s., and the same prices were also paid for three months, but Tuesday brought a decline to £47 5s. and Wednesday to £47 2s. 6d. On Thursday the decline made further progress, spot changing hands at down to £46 16s. 3d., and three months down to £46 17s. 6d., and to-day after three months had changed hands as low as £46 15s. we improved, closing firmer at £46 16s. 3d. s.c., and £46 17s. 6d. three months.

## Tin.

has been a very steady market this week, but business in the article has been of a languid description. The opening was quiet at £60 5s. three months, 2s. 6d. less being taken later in the day, and £59 12s. 6d. for spot Straits. Three months was done during the next two days successively at £60 1s. 3d., £60, and £60 1s. 3d., and cash at £59 11s. 3d. and £59 10s. Thursday's business was unimportant, but values were rather firmer again, up to £59 12s. 6d. s.c., and £60 3s. 9d. three months being paid. To-day the flatness was more marked, and £59 7s. 6d. s.c., and £59 18s. 9d. three months were accepted, the close being dull, at £59 7s. 6d. and £59 17s. 6d. respectively. Billiton tin opened at 35½ fl. s.c. and 35½ fl. three months, lost ½, and then rallied, closing steady at 35½ fl. and 36 fl. respectively, with Banca at 36 fl.

## Pig Iron.

The shipments from Scotland last week show a falling off compared with those of the parallel period of last year of about 900 tons. Scotch warrants opened in Glasgow at 46s. 2d., a month, and 46s. 1d. s.c. During the first four days there was a constant oscillation between these values, and 46s. 7d. and 46s. 5d. respectively. To-day business in s.c. was done at 46s. 0d. to 46s. 4d. a month, sellers Scotch, whilst Hematite and Middlesbrough close respectively at 47s. 2d. and 37s. 6d.

## Lead.

Values have been rather firmer this week, with a moderate demand from consumers, and we close steady at £10 17s. 6d. soft foreign, and £11 2s. 6d. to £11 5s. English.

## Spelter.

The prices reported vary considerably, for the reason that everything depends on the brand and time of delivery. For really good, well-known brands and early delivery very full prices are being paid, as but little of such spelter is to be had. The market closes firm at £17 2s. 6d. to £17 5s. ordinaries, and £17 7s. 6d. to £17 10s. specials.

## Antimony.

remains featureless, but steady as to price, the quotation continuing at £29 10s.

## Quicksilver.

Fists are still quoted at £6 10s., and seconds at £6 8s. 6d. to £6 9s., the tendency being rather firm.

The following are to-night's (August 28) prices of metals:

	Copper	Alloys	Tin	Iron	Lead	Spelter	Antimony	Quicksilver	Manganese	Aluminium	Nickel
Tough cake and ingot	45 0 0	0 0 5	63 5 5	2 6 1 1/2	11 2 6	17 5 8	29 10	5 8 6	1 1 1	0 1 1	0 1 1
Best selected	49 0 0	0 0 5	65 5 5	2 6 1 1/2	11 2 6	17 5 8	30 10	5 8 6	1 1 1	0 1 1	0 1 1
Electrolytic Copper	49 15 0	0 0 5	66 5 5	2 6 1 1/2	11 2 6	17 5 8	31 10	5 8 6	1 1 1	0 1 1	0 1 1
Sheets and sheeting	57 10 0	0 0 5	67 5 5	2 6 1 1/2	11 2 6	17 5 8	32 10	5 8 6	1 1 1	0 1 1	0 1 1
Flat bottoms	60 10 0	0 0 5	68 5 5	2 6 1 1/2	11 2 6	17 5 8	33 10	5 8 6	1 1 1	0 1 1	0 1 1
Oilill bars	47 16 3	0 0 5	69 5 5	2 6 1 1/2	11 2 6	17 5 8	34 10	5 8 6	1 1 1	0 1 1	0 1 1
Good merchantable,	48 17 8	0 0 5	70 5 5	2 6 1 1/2	11 2 6	17 5 8	35 10	5 8 6	1 1 1	0 1 1	0 1 1
Copper tubes, seamless	0 0 5	0 0 5	71 5 5	2 6 1 1/2	11 2 6	17 5 8	36 10	5 8 6	1 1 1	0 1 1	0 1 1
BRASS : Wire	0 0 5	0 0 5	63 5 5	2 6 1 1/2	11 2 6	17 5 8	37 10	5 8 6	1 1 1	0 1 1	0 1 1
" Tubes (solid drawn)	0 0 5	0 0 5	64 5 5	2 6 1 1/2	11 2 6	17 5 8	38 10	5 8 6	1 1 1	0 1 1	0 1 1
" Sheets	0 0 5	0 0 5	65 5 5	2 6 1 1/2	11 2 6	17 5 8	39 10	5 8 6	1 1 1	0 1 1	0 1 1
PHOSPHOR BRONZE : Alloys II.	81 0 0	0 0 5	66 5 5	2 6 1 1/2	11 2 6	17 5 8	40 10	5 8 6	1 1 1	0 1 1	0 1 1
" III. or	82 0 0	0 0 5	67 5 5	2 6 1 1/2	11 2 6	17 5 8	41 10	5 8 6	1 1 1	0 1 1	0 1 1
" VII.	83 0 0	0 0 5	68 5 5	2 6 1 1/2	11 2 6	17 5 8	42 10	5 8 6	1 1 1	0 1 1	0 1 1
" XI.	78 0 0	0 0 5	69 5 5	2 6 1 1/2	11 2 6	17 5 8	43 10	5 8 6	1 1 1	0 1 1	0 1 1
DUBRO METAL	72 0 0	0 0 5	70 5 5								

# "THE MINING JOURNAL" SHARE LIST.

**ABBREVIATIONS AND REFERENCES.**—The following are the significations of the abbreviations and references which occur in the Share List:—*Ay.*, Antimony; *A.*, Arsenic; *Bl.*, Blende; *Bz.*, Borax; *C.*, Copper; *D.*, Diamond; *G.*, Gold; *I.*, Iron; *L.*, Lead; *M.*, Manganese; *N.*, Nitrates; *P.*, Phosphates; *Q.*, Quicksilver; *R.*, Ruby; *S.*, Silver; *Si.*, Silver-lead; *Sm.*, Sulphur; *T.*, Tin; and *Z.*, Zinc. \* in the "Amount of Share" column of British Mines signifies that the mine is conducted on "Cost Book" principles;  $\dagger$  in the "Head Office" column of African Mines signifies that the address given is not that of the head office but of a sub, or transfer office; and  $\ddagger$ , following the names of African Mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

\* The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

## AFRICAN MINES.

Name.	Closing Price, Aug. 28, 1896	Closing Price, Aug. 21, 1896	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.	E. s. d.
Abbott's Con. Reefs	6/-	7/-	8/- 7/-	1/- C	—	1 0 0	—	De Kaap	—
African Estates	13/-	13/-	12/- 14/-	1/- C	2/- & rts Oct. 1895	1 0 0	438,000	—	—
Gold Envry	13/-	13/-	11/- 12/-	1/- C	rts Oct. 30 '95	1 0 0	175,000	—	—
Africana	9/-	10/-	9/- 11/-	1/- C	—	1 0 0	1,075,000	Transvaal.	—
Afrikaner	13/-	13/-	13/- 13/-	1/- C	rts May 24 '95	1 0 0	40,000	13. College Hill	—
Aldier Consolidat.	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	257,000	1. Moorgate place,	16. George street
Alexandra Estate G	13/-	13/-	9/- 13/-	1/- C	—	1 0 0	225,000	Rand	Winchester House
Angelo	4/-	5/-	4/- 5/-	1/- C	—	1 0 0	17,000	7. Africa	2. Princes street
Anglo-French Exp.	5/-	5/-	5/- 5/-	1/- C	7/- May 29 '96	5 0 0	30,000	Minas	Winchester House.
Matabeleland	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	39,750	West Cost	Dashwood House.
Appentoo ... G	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	77,585	Rand	8. Old Jewry. I
Aurora ... G	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	65,000	7. Lothbury	Token Ho., OphthillAv
West United	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	100,000	—	—
Austral-African	13/-	13/-	13/- 13/-	1/- C	3/- Dec. 18 '95	1 0 0	250,000	—	—
Balkis Korteling G	1/3 1/3	1/3 2/	1/3 1/3	1/- C	—	0 10 0	520,000	Transvaal	85. Gracechurch-st.
" Lane	2/-	6/-	6/- 6/-	1/- C	1/ Feb. 13 '96	0 0 0	520,000	—	—
Bantjes Consol ... G	2/-	3/-	3/- 3/-	1/- C	rts Sep. 24 '95	1 0 0	83,000	—	15. Geo. st., Mn Ho.
Barnato Bank ...	2/-	2/-	2/- 2/-	1/- C	—	1 0 0	2,25,000	—	7. Lothbury
Consoi ... G	2/-	3/-	2/- 2/-	1/- C	—	1 0 0	1,000,000	—	17. Basinghall-street
Barrett ... G	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	207,196	De Kaap	18. St. Swithin's-lane
Bechuanaland Exp.	13/-	13/-	13/- 13/-	1/- C	rts Jy 24 '95	1 0 0	400,000	Bechuanana.	72. Basinghall street
" Trad'g Assoc.	13/-	13/-	13/- 13/-	1/- C	1/6 July 15 '95	0 10 0	94,307	—	—
Big Golden Quarry	6/-	1/-	1/- 1/-	5/-	—	0 5 0	483,226	Kaap Rivr	Warnford Court.
Block "B" Lang.	13/-	2/-	13/- 13/-	1/- C	—	1 0 0	535,000	Hand	8. Prince-st., E.C. I
Bonanza	3/-	3/-	2/- 2/-	1/- C	—	1 0 0	2,00,000	Turfont'	120. Bishopsgate-st.
Brit. S. A. Char.	3/-	3/-	2/- 2/-	1/- C	rts Jy 25 '95	1 0 0	1,999,750	5. Africa	15. St. Swithin's-lane
Buffelsdorp ... G	3/-	3/-	2/- 2/-	1/- C	15/- Rv. 28 '95	1 0 0	250,000	Potchefstr	7. Lothbury.
Central	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	—	8. Old Jewry.	8. Old Jewry.
" Consolidated	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	225,000	—	Warnford Court
Cape Asbestos	3/-	1/-	3/- 1/-	1/- C	—	1 0 0	50,311	Orange Rv	8. Old Jewry, E.C.
" Copper ... G	2/-	2/-	2/- 2/-	1/- C	2/ June 12 '96	1 0 0	300,000	Cape Co.	19. St. Swithin's-lane
" 6% Pref. ... G	2/-	2/-	2/- 2/-	1/- C	2/ June 12 '96	2 0 0	45,000	9. Queen-street-place.	9. Queen-street-place.
Cassel Coal	1/-	2/-	13/- 13/-	1/- C	1/5 Apr. 29 '96	1 0 0	75,000	Johannbrg.	89. Cannon-street.
Gen. de Kaap	3/-	3/-	3/- 3/-	1/- C	—	0 2 6	225,000	De Kaap	Palmerston Bridge
" Roeddy Deep	2/-	2/-	2/- 2/-	1/- C	—	1 0 0	—	126. Bishopsgate st.	126. Bishopsgate st.
Champ d'Or ... G	2/-	3/-	13/- 13/-	1/- C	3/2 Feb. 27 '96	1 0 0	116,018	and	8. Old Jewry, E.C.
Charterland G.F.	3/-	3/-	13/- 13/-	1/- C	—	1 0 0	150,000	19. S. Swithin's-lane	19. S. Swithin's-lane
Chimes West	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	150,000	Winchester Ho.	Winchester Ho.
City and Sub. N.W.G	5/-	5/-	41/- 41/-	4/- C	4/10-June 15 '95	4 0 0	340,000	Band	Gresham Ho.
Con. Bultfontein D	32/-	3/-	32/- 3/-	1/- C	9d. July 15 '95	1 0 0	721,500	Grighuind	62. Lombard-st.
Con. Deep Levels G	5/-	5/-	5/- 5/-	1/- C	4/- July 15 '95	1 0 0	187,250	Transvaal	30. St. Swithin's-lane
Con. G. Fields S.A.	13/-	13/-	12/- 12/-	1/- C	10/ May 19 '96	1 0 0	250,000	S. Africa	8. Old Jewry.
Do. 6% Pref. ... G	25/-	16/-	25/- 25/-	1/- C	7.1d. June 26 '96	1 0 0	1,243,999	—	—
Do. 5% % Deben ... G	10/-	10/-	10/- 10/-	1/- C	—	5 0 0	60,000	—	—
Crown Deep ... G	13/-	13/-	11/- 12/-	1/- C	—	1 0 0	250,000	Rand	120. Bishopsgate-st.
" Keef ... G	11/-	11/-	11/- 11/-	1/- C	10/- Apr. 29 '96	1 0 0	120,000	—	—
De Beers Consol. D	29/-	30/-	30/- 30/-	5/- C	22/- July 15 '96	6 0 0	789,791	Kimberly	62. Lombard-st.
Do. 5% 1st Deb.	1/-	1/-	1/- 1/-	5/- C	5% July 15 '96	—	425,000	—	—
Do. 5% 2nd Deb. G	10/-	10/-	10/- 10/-	—	—	—	720,400	Doornekop	Doornekop
Doornfontein ... G	5/-	6/-	3/- 4/-	1/- C	—	1 0 0	250,000	Warnford Court	Winchester Ho.
Driefontein	2/-	3/-	2/- 3/-	1/- C	—	1 0 0	175,000	Winchester Ho.	28. Leadenhall-bridge
Durban Hoedope. G	7/-	7/-	7/- 7/-	1/- C	3/- June 26 '96	1 0 0	212,500	Rand	120. Bishopsgate st.
" Deep	4/-	4/-	4/- 4/-	—	—	—	—	—	—
Eastleigh ... G	1	1 1/2	1 1/2	1/- C	rts May 14 '96	1 0 0	240,000	Kirkaldydrp	52. Leadenhall Street
East Orion ... G	5/-	5/-	5/- 5/-	1/- C	—	1 0 0	275,000	Hand	8. Old Jewry.
" Hand	13/-	13/-	7/- 7/-	1/- C	—	1 0 0	570,000	Hand	170. Winchester-ho.
Exploration ... G	21/-	21/-	21/- 21/-	1/- C	rts June 26 '96	1 0 0	145,000	S. Africa	30. St. Swithin's-in.]
Exploring L & M.	13/-	13/-	13/- 13/-	1/- C	2/ Dec. 16 '95	1 0 0	215,125	Tati Concessions ...	19.
Ferreira ... G	19/-	20/-	20/- 21/-	1/- C	25/ Aug. 26 '96	1 0 0	45,000	Trans. Coal Trust ...	13/4 13/-
French Land ... G	3/-	3/-	3/- 3/-	1/- C	—	1 0 0	480,000	Consolidat.	13/4 13/-
Goldenhuis Deep G	5/-	6/-	5/- 5/-	1/- C	—	1 0 0	265,000	Transvaal	120. Bishopsgate st. Wn]
Goldenhuis Est. G	3/-	4/-	3/- 3/-	1/- C	6/- Jy 26 '95	1 0 0	187,000	Hand	30. St. Swithin's-lane
" Main Reef	1/-	1/-	1/- 1/-	1/- C	2/ Feb. 13 '96	1 0 0	150,000	Hand	8. Old Jewry.
George Goch ... G	23/-	23/-	23/- 23/-	1/- C	—	1 0 0	100,000	Drieston .	Johannesburg.
Ginsberg New ... G	2/-	2/-	2/- 2/-	1/- C	—	1 0 0	130,000	Grootfontein	2. Drapers-gardens.
Glencairn ... G	3/-	3/-	3/- 3/-	1/- C	2/6 Feb. 13 '96	1 0 0	200,000	Vogelstruis Estate	65, Chancery Lane.
Golden Dove ... G	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	60,000	" Cons. Deep ...	8. Old Jewry.
Gld. Pts. Deep... G	13/-	13/-	13/- 13/-	1/- C	—	1 0 0	800,000	S. Africa	7. Lothbury.
G.F. of Lyden'bg	3/-	3/-	3/- 3/-	1/- C	—	1 0 0	200,000	Lyden'bg	19. St. Swithin's-lane.
G.F. of Mashondl.	3/-	3/-	3/- 3/-	1/- C	—	1 0 0	—	Van Hyne	2. Old Jewry.
G.F. of Tde Fuego	17/-	12/-	17/- 12/-	1/- C	—	1 0 0	—	—	Winchester Ho.
Graskop ... G	5/-	6/-	5/- 6/-	5/- C	5/- 6% Mar. '92	0 5 0	400,000	Grootfontein	75. Lombard-st.
Gt. Ester. Colliery	13/-	13/-	13/- 13/-	1/- C	10/ Mar. 15 '96	1 0 0	376,566	Grootfontein	2. Old Jewry

**"THE MINING JOURNAL" SHARE LIST—(Continued)**

## AUSTRALIAN AND NEW ZEALAND MINES

Name.	Closing Price, Aug. 23, 1896	Closing Price, Aug. 21, 1896	Amt. of Share	When last XD and Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Aladdin Lamp G	23/4	23/4	1	8 July 15 '96	1 00	100,000	Unknown S.W.	4-6, Throg. Avenue, Worcester House, 3, Princes Street.
Anglo-Aust. Corp.	1 1/4	1 1/4	1	100 7/8 '95	1 00	125,000	W. Australia	
Anglo-French Exp.	1 1/4	1 1/4	1	Ex-div Aug 18 '96	1 00	40,000	"	
Ger. Explor.	1 1/4	1 1/4	1	5/ Oct. 20 '95	1 00	4,000	"	
Arche. ....G	3/4	3/4	1	-	1 00	100,000	N.Z. Island	9,067
Arrow Brownhill G	3/4	3/4	1	-	1 00	9,067	"	
America Gold Mines	3/4	3/4	1	-	1 00	10,000	"	
Australasian ....G	3/4	3/4	1	-	1 00	375,106	S. Australia	27, Bucklersbury
Australian C	-	-	20	1/ July 30 '96	7 7/8	218,315	5, Queen-st., place	5, Queen-st., place
Aus. Hill. Con.	1/2	1/2	1	1/ June '91	1 00	57,494	Bark R.N.W.	New Broad-street
Babes Creek ...G	3/4	3/4	1	-	1 00	10,000	H'g've NSW	Winchester House,
Banana Queen & Co.	3/4	3/4	1	-	1 00	18,000	Hillgrove N.S.W.	Hillgrove N.S.W.
Baptist's New J.R.	5/8	5/8	1	4/9 5/3	1 00	70,000	Pitt, W.A.	F. & H. Blundell St.
Big Blow .....G	6/8	7/8	1	-	1 00	60,000	Coolgardie	13, Cannon Street.
Black Flag Consid.	1 1/4	2	1	-	1 00	400,000	Coogardie	4, Bishopsgate St. W.
Proprietary	9/16	11/16	1	-	1 00	500,000	Coogardie	1, Metal Econ. Bldgs
Blyatree Freehold	3/4	3/4	2/	-	1 00	87,299	Coogardie	Dashwood House.
Blue Spar and G.G.	10/11	11/12	1	-	1 00	120,000	Orion N.Z.	6, 8, Great St. Helen's Place
Blomie Dundas	9/8	9/8	1	-	1 00	250,000	Otago N.Z.	15, S. Helen's Place
Brilliant .....G	3/4	1	1	-	1 00	70,000	O.T.Q. T.	Charters Towers.
Block .....G	1 1/8	1 1/8	1	10/15 15/16	1 00	72,000	18, S. Helen's Place	18, S. Helen's Place
St. Geo. G.	1 1/4	1 1/4	1	10/	1 00	240,000	Charters Towers.	Charters Towers.
Bell Brook Hill S	2/4	2/4	1	-	1 00	430,000	Woodhouse	23, Woodgate Street.
Broad Arrow	2/7	3/7	1	-	1 00	81,500	N.S. Wales	3, Moorgate Street
Briske Hill Prop. S	2 1/2	2 1/2	1	-	1 00	Hannan's Quogardie	3, Gt. Winchester st.	
Brownhill Prouty	9/16	11/16	1	-	1 00	"	Cooptail House.	
Burkans Birthday	1 1/4	2	1	-	1 00	"		
Candy Hill .....G	3/4	3/4	1	-	1 00	15,000	9-10, King Street, E.	
Central Founder G	12/15	15/18	1	-	1 00	King St., WA.	Worl's Ho., Walbr. 1, Met. Exch. Bldgs	
Exp. & Invst.	5 1/2	15/18	1	par 5% pm	1 00	200,000	W. Australia	
" of W. A.	7/8	1	1	1/7/24 Mar 27 '96	1 00	120,000	"	
Charters Tower ...G	1 1/2	1 1/2	1	1/7/24 Mar 27 '96	1 00	200,000	Queensland W. Australia	1,09
Colonial Finance	1 1/4	1 1/4	1	10/ Mar. 27 '96	1 00	21,140	"	
Gol. Fields	3/4	3/4	1	-	1 00	75,250	Pilbara	73, Coriohill.
Gen. G. M. of W. A.	2/4	3/4	1	-	1 00	Murc. WA	Murc. WA	
Murchison	3/4	3/4	1	-	1 00	235,583	W. Australia	30, Moorgate Street.
Centl. & W.A. Trust	1 1/4	1 1/4	1	10/	1 00	104,47	"	Broad Street.
Coogardie Gold	1 1/4	1 1/4	1	10/	1 00	90,000	Queensland W. Australia	30, S. Swinith's In.
Mint & L.K.G.	1 1/8	1 1/8	1	10/10 15/16	1 00	150,000	"	30-1, S. Swinith's In.
Green Cat. ....G	1 1/2	1 1/2	1	10/2 2/6	1 00	100,000	Hanis's WA	110, Cannon Street.
Green Co. United	1 1/4	1 1/4	1	-	1 00	115,000	"	110, Cannon St., E.C.
Crown United....G	1 1/4	1 1/4	1	10/12	1 00	75,000	Queensland	16, S. Helen's Place
Cumberland (New) G	1/3	1/3	1	7/7 7/8	1 00	184,99	W. Australia	Winchester Ho., E.C.
Day Dawn B.W.G.	14/16	15/16	1	-	1 00	498,400	"	
P. C. G.	3/8	9/8	1	-	1 00	490,000	"	
Egyptian K. ....G	1/2	1/2	1	-	1 00	120,000	Victoria ... Mt. Margaret	71-72, King Wm. St. Finsbury House.
Egypt's Nest	3/8	1	1	-	1 00	2,500	Hauraki N.Z.	
Edu. Hauksb. ....G	3/7	4/7	3/	5/	1 00	400,000	W. Australia	
Explorers Synd.	2 1/2	5 1/2	1	7/8 April 29 '96	1 00	9,000	"	Cooptail House.
Fingal Min. Extra	9/16	9/16	1	10/	1 00	150,000	"	
Finence	1 1/2	1 1/2	1	10/15 15/16	1 00	50,000	N.S. Wales	4, Sun Court
Gibraltar Cons.	1 1/4	1 1/4	1	1 1/2 1 1/2	1 00	300,000	W. Australia	18, S. Swinith's In.
Gladstone .....G	1 1/2	1 1/2	1	-	1 00	450,000	W. Australia	6, Queen street-place
Glenrock .....G	1 1/2	1 1/2	1	10/	1 00	175,000	"	3-5, Queen-st. B.C.
Golden Cement G	1 1/2	1 1/2	1	-	1 00	100,000	Queensland W. Australia	34-36, Gresham-st
Crown. G.	1 1/2	2 1/2	1	25/25 25/25	1 00	180,000	"	11, Helen's Place
House ...G	1 1/2	1/2	1	10/	1 00	100,000	Queensland W. Australia	9-10, King Street, E.C.
Horse Shoe .....	1 1/2	1 1/2	1	-	1 00	90,000	"	4, Bishopsgate St. W.
Link .....G	1 1/2	1 1/2	1	5/ - Oct 30 '95	1 00	120,000	"	20, Bishopsgate St. W.
Plum. ....G	1 1/2	1 1/2	1	-	1 00	60,000	Yilgarn ..	1, Gracechurch St.
Gold Estates	2/4	2/4	1	3/ June 12 '96	1 00	240,000	"	3, Gracechurch St.
Great Boulder G	73/4	72/4	1	7/4 75/8	1 00	1 1/2	Kurnalpi W. Australia	3, Pines Street.
" Junction	1 1/2	1 1/2	1	10/15 15/16	1 00	175,000	"	13-14, Abchurch In.
" M'n R't's	1 1/2	1 1/2	1	10/2 11/12	1 00	50,000	"	17, Gordon St., Glas.
Frogal Rife	3/4	3/4	1	10/	1 00	240,000	"	3-9, Mildred's Ct.
Graham Synd. ..	Moila Jar	Moila Jar	1	4/ & 10 Jun 29 '96	1 00	150,000	Queensland W. Australia	34-36, Gresham-st.
Halswell	23/4	23/4	1	-	1 00	100,000	"	18, S. Swinith's In.
Hampshire Gold Field	15/18	15/18	1	-	1 00	300,000	W. Australia	6, Queen street-place
" Gold Hill	1/2	2/3	1	10/2 2/3	1 00	120,000	Queensland W. Australia	4, The exmeedle at
" Plains	49/6	41/6	1	9/4 9/4	1 00	180,000	"	3-5, Queen-st. B.C.
" Plainsmen	6/8	7/8	1	5/6 6/6	1 00	65,000	"	3, Princes Street, EC
Hannan's Brown Hill	15/16	16/16	1	10/15 15/16	1 00	147,000	"	24, Old Broad Street
Devil's Den	1 1/4	1 1/4	1	-	1 00	51,167	Kalg. W. A.	13, S. Swinith's In.
Main Beest.	1 1/2	1 1/2	1	10/10 12/12	1 00	100,000	"	38, Cornhill.
North	1 1/2	1 1/2	1	-	1 00	100,000	"	18, S. Swinith's In.
100 Acres	3/8	1	1	-	1 00	70,000	Hann. W. A.	Dashwood House.
Greyoys	15/18	23/18	1	10/15 11/16	1 00	100,000	"	28, Bucklersbury
Prop.	2/4	2/4	1	21/2 21/2	1 00	100,000	"	19, Cannon Street.
Reward. ....G	21/2	21/2	1	25/25 25/25	1 00	100,000	"	1, Cannon Street.
Star.	1 1/2	1 1/2	1	-	1 00	100,000	"	1, Cannon Street.
Sakaraki. ....G	18/19	17/17	1	17/10 18/18	1 00	320,000	Hann. W. A.	7-10, King Street, E.C.
Hill or Miss.	23/4	23/4	1	25/25 25/25	1 00	120,000	Coolgardie W. A.	4, Bishopsgate St. W.
Idaho .....G	4/6	5/6	1	5/6 5/6	1 00	183,439	"	18, S. Swinith's In.
Ideasong .....G	7/6	1/1	1	3/3 10/10	1 00	242,260	"	24, Old Broad Street
Kalgurli	11/12	11/12	1	-	1 00	34,000	Queensland W. Australia	19, 26, Gresham-st.
Kangana .....G	13/14	13/14	1	13/13 13/13	1 00	60,000	"	11, Helen's Place
Kathleen	3/8	4/4	1	3/6 4/4	1 00	15,000	Hann. W. A.	9-10, King Street, E.C.
" Crown	2/5	2/5	1	2/3 2/3	1 00	44,000	Coolgardie W. A.	4, Bishopsgate St. W.
Unt. G.	3/4	3/4	1	3/6 4/4	1 00	60,000	"	18, S. Helen's Place
Kunata Queen. ....G	3/4	3/4	1	3/6 4/4	1 00	120,000	Hann. W. A.	18, S. Helen's Place
" Roots	10/11	11/11	1	5/ - 5/	1 00	78,000	Hann. W. A.	18, S. Helen's Place
Kuwaiti Caledonian G	16/18	16/18	1	16/16 16/16	1 00	46,000	Coolgardie W. A.	18, S. Helen's Place
Kunai K. ....G	4/5	4/5	1	-	1 00	52,527	Murchison	18, S. Helen's Place
Lady Looch. ....G	3/4	3/4	1	3/6 3/6	1 00	50,000	Queensland W. Australia	18, S. Helen's Place
" Mary Annaig.	3/4	3/4	1	3/6 3/6	1 00	150,000	"	18, S. Helen's Place
Shenton	2/3	2/3	1	2/3 2/3	1 00	46,000	Queensland W. Australia	18, S. Helen's Place
Limerick	1 1/4	1 1/4	1	1 1/4 1 1/4	1 00	120,000	"	18, S. Helen's Place
Li. & Con. Invest.	4/4	5/5	1	4/4 5/5	1 00	150,000	Hann. W. A.	18, S. Helen's Place
Len. & Globe Fin.	45/6	47/6	1	45/6 47/6	1 00	120,000	Coolgardie W. A.	18, S. Helen's Place
Le. & W. Aust. Expl.	19/20	21/20	1	17/18 18/18	1 00	46,000	"	18, S. Helen's Place
W. A. & Invest.	21/20	21/20	1	21/25 25/25	1 00	100,000	Hann. W. A.	18, S. Helen's Place
Mainland Cons. G	3/4	3/4	1	3/4 3/4	1 00	150,000	"	18, S. Helen's Place
Mawson's Reward. G	12/16	16/16	1	12/16 16/16	1 00	62,000	Murchison	18, S. Helen's Place
Mawson Gold Est.	12/16	15/16	1	12/16 15/16	1 00	100,000	"	18, S. Helen's Place
" (Driscoll)	1 1/2	1 1/2	1	1 1/2 1 1/2	1 00	100,000	"	18, S. Helen's Place
Mills Day Dawn G	11/16	11/16	1	11/16 1 1/2	1 00	300,000	Queensland W. Australia	18, S. Helen's Place
Missan. ....G	2/3	2/3	1	-	1 00	135,000	"	18, S. Helen's Place
Mount Lyell. ....G	8/8	9	8/8	-	1 00	300,000	Tasmania W. Australia	18, S. Helen's Place
Mount Margaret	11/15	21/16	1	11/15 21/16	1 00	100,000	"	18, S. Helen's Place
" Morgan G.	3/8	4/8	1	3/8 4/8	1 00	150,000	Queensland W. Australia	18, S. Helen's Place
" Howe	1 1/2	1 1/2	1	-	1 00	62,000	"	18, S. Helen's Place
Marchion N. Ch'in. ....G	1/6	1/6	1	1/6 1/6	1 00	160,000	Murchison	18, S. Helen's Place
Mac's Hauksr. ....G	3/6	3/6	1	3/6 3/6	1 00	220,000	"	18, S. Helen's Place
Southern Star	1/6	2/3	1	1/6 2/3	1 00	30,000	"	18, S. Helen's Place
South Kalgurli	1/6	1 1/2	1	1/6 1 1/2	1 00	53,020	"	18, S. Helen's Place
Shay Shot & Rail	3/6	3/6	1	3/6 3/6	1 00	250,000	"	18, S. Helen's Place
Success. ....G	3/6	4/3	1	3/6 4/3	1 00	40,000	"	18, S. Helen's Place
Talpa G. Estate	3/4	4/3	1	3/4 3/4	1 00	400,000	Queensland W. Australia	18, S. Helen's Place
Tearo Creek	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Thames Hauksr.	1/6	1/6	1	1/6 1/6	1 00	120,000	"	18, S. Helen's Place
Tokates of Hauksr.	1/6	3/3	1	1/6 3/3	1 00	100,000	"	18, S. Helen's Place
Town Prop. of W.A.	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Triumph. ....G	3/6	4/4	1	3/6 4/4	1 00	100,000	"	18, S. Helen's Place
Trium. ....G	3/6	3/6	1	3/6 3/6	1 00	100,000	"	18, S. Helen's Place
U.S. Min. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
U.S. Water Washi. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Victor Wallis. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Victory (G. T.). ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Wahl. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
" G. Junction. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Silverton. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Wattlebank. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Central. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Cross. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Extended. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
United. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Wauhau. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18, S. Helen's Place
Water Trout Min. ....G	1/6	1/6	1	1/6 1/6	1 00	100,000	"	18,

**AUSTRALIAN AND NEW ZEALAND MINES—(Continued)**

Name.	Closing Price, Aug. 26, 1898	Closing Price, Aug. 21, 1898	Amt. of Share	When last Dividend	Called up Per Share	Amount of Stock or No. of Shares Issued.	Situation of Min.	Head Offices
W-Australian G.F.	9½ 8¾	9½ 9¾	1 0	6/ July 30 '98	1 0 0	68,500	Coogardie	28-29, S. Swithin's-lane
" " Mines Dvl	1½ 2 pm	1½ 2 pm	1 0	10/ Oct. 30, '95	1 0 0	40,000	W. Austral.	3, Princes Street
" " Aust. Mining	8½ 8½	8½ 8½	5/	7½ d. Mar. 17 '98	0 5 0	320,000	"	257, Winchester Ho.,
" " Aust. Pioneer	2½ 2½	2½ 2½	2½ 1½ 1½	10/ June 12 '98	1 0 0	19,393	"	139, Cannon-street,
" " Share Corp.	15½ 15½	15½ 15½	1 0 0	-	0 5 0	250,0.0	"	28, St. Swithin's-lane
" " Venture.....	2½ 2½	2½ 2½	1 0	15/ Oct. 30 '95	1 0 0	-	"	3, Princes Street.
West Boulder .....	¾ ¾	¾ ¾	-	-	-	-	-	-
White Feather ...	17% 2%	17% 2%	1 0	-	1 0 0	60,000	Coogardie	28 & 29, S. Swithin's-lane
Zeehan Montana S	- -	- -	1 0	-/4 Dec. 95	1 0 0	66,000	Tasmania	11, Queen Victoria st.
" " "	- -	- -	1 0	2½ Dec. 95	0 2 0	12,000	"	"

## NORTH AMERICAN MINE

Alaska Mexican...G	1% 1%	1% 1%	\$5	4-5d. Feb., '95	\$5	173,500	Alaska.....	30, St. Swithin's-in-
.. Treadwell G	5 5%	5 5%	\$25	1/ June 30, '95	\$25	200,000	"	" "
Anaconda .....	C	8% 8%	8% 8% 1/2	825	10% May 9, '95	\$25	1,200,000	Montana...
Anglo Mexican ...S	S	4% 4%	4% 4%	5 0	1/- July 15, '95	5 0 0	74,250	"
Arizona (Pref.) Cu.	G	53/3 53/3	54/9 55/	4 0	1/6 July 1, '95	4 0 0	158,920	23, College Hill;
" 6% A Dobein,		114	114	100 0	6% X May 14 '95	100 0 0	4235,300	74, Geo-st., Edinbor
" 7% B Dobein		101% 102		100 0	7% May 14 '95	100 0 0	181,300	"
De Lamar.....GS		14/6 15/6	14/6 15/6	1 0	1/- Feb. 13 '95	1 0 0	400,000	Idaho.....
Dickens Custer GS		-8/ 1/-	-8/ 1/-	1 0	—	0 19 9	420,000	"
Doria..... ....G	G	7/5 8/6	7/5 8/6	5/	—	0 5 0	125,000	Colorado...
Elkhorn Priority S	S	1/4dis 1/4pm	1/4dis 1/4pm	1 0	-/3 June 26 '95	0 10 0	175,000	Montana
Gen. M'g. Assoc...	S	5% 6%	5% 6%	5 10	12/-May 14 '95	5 10 0	27,463	C. Breton
Golden Feather G	G	1/8 1/8	1/8 1/8	1 0	—	1 0 0	180,000	California
" Gate .....G	S	3/- 4/-	3/- 4/-	1 0	—	0 19 6	78,600	"
" Leaf .....G		-/3 1/3	-/3 1/3	1 0	—	1 0 0	300,259	Montana
Hall Mines .....	G	2% 2%	1 1/2%	1 0	—	1 0 0	250,000	3, Draper's Gardens, Brit. Col.
Harquahala... ...G		1 6 2/6	1/6 2/6	1 0	-/6 Nov. 11, '94	1 0 0	300,000	Arizona ..
Holcomb Valley G		/9 1/3	/9 1/3	5/	—	0 5 0	940,000	California
Jackson Goldfields		/3 /6	/3 /3	5 0	—	0 5 0	408,635	"
La Plata.....S	S	/3 /9	/3 /9	5/	1/3 Oct. '92	0 4 8	405,000	Colorado
La Yesca .....GS		1/- 1/6	1/ 1/6	1 0	—	0 19 6	200,000	Mexico ...
Montana .....GS		4/- 5/-	4/ 5/-	1 0	-/3 June 26 '95	0 19 0	897,198	Montana
New Guston .....S	S	3% 3%	3% 3%	1 0	1/- Oct. '92	1 0 0	110,000	Colorado
Palmarejo .....GS		2/ 2 6	2/13/ 2/73/	1 0	—	1 0 0	418,333	Mexico ...
Pinos Altos(D)GS		3% 3%	3% 3%	1 0	-/8 Mar. '90	1 0 0	100,000	"
Richmond ...GSL		1 1%	1% 1%	5 0	1/- Dec. 18 '95	5 0 0	84,300	110, Cannon-street.
St. George.....		/3 /9	/3 /9	5/	—	0 5 3	—	44, Coleman-street.
Sierra Butter ...G		3% 3%	3% 3%	2 0	-/3 Apr. 29 '95	2 0 0	122,500	St. Geo Ho., E/cheap
" Plumas Eur. G		1/6 1%	1/6 1%	2 0	-/9 Apr. 29 '95	2 0 0	140,885	"
Springdale.....G		1/- 1/6	1/ 1/6	\$1	-/3 Sep. 28, 9	\$1	1,000,000	Colorado
Twin Lake Placers		1% 1%	1% 1%	1 0	3/- Feb. '95	1 0 0	26,000	"
								5, Lawrence P. Hl. H

## SOUTH AND CENTRAL AMERICAN MINES

Anglo-Chilian P/LN .. % RystlMB	816 9 107 110 Argen. Concessions /6 1/6	14 9 167 110 1/ 2/	19 0 — 2/	7/0 Feb. 27 '96 8% July 1 '96 —	10 0 0 10 2 0 —	35,000 \$220,000 150,000	Autofagst. S. Luis ...	123, Bishops-st. W 3 & 5, Queen Street				
Caramal .....	G -/3 - 9 Cayltonia .....	G 7/ 1 Oroton .....	G -/3 8/ Colorado N/S, .N	G 1 1/6 Colombian Hy., G Opioapa .....	G 5/6 5/6 2/6 2/6	1/ 6 1 1/6 1 0 1/ -/3 4/6 4/6	2/6 2 0 5/ 5 5 0 1 0 1/ -/4 2 0	0 2 5 2 0 0 0 4 0 8 0 0 1 8 0 1 0 0	1,330,000 125,000 200,000 32,000 75,000 100,000	Venezuela Peru ..... Colombia Chili ..... Colombia Chili .....	57, Moorgate-st. E.C 52, Leadenhall street 5, Calthorpe-bdg.s, E.C 12, King-st., Liverp'l 10, Blomfield-street Dashwood House, E.C	
Darien "A" .....	G 6/6 d/6 " " "B" .....	G 7/6 6/6 7/6 6/6	6/6 6/6 7/6 6/6	1 0 1 0	— x, now Apr 27 '96	1 0 0 1 0 0	49,563 30,010	Colombia	Manchester.			
El Callao .....	G 3/6 3/6 Frontino & B., G	1/16 1/16 1/16 1/16	3/6 3/6 1/16 1/16	5 0 1 0	9/4(d. Feb. '94 9/1. July 16 '91	5 0 0 1 0 0	357,500 128,662	Venezuela Colombia	8, Bishopsgate-st, Wa 184, Gresham House			
Glenrock .....	G 1/3 1/9 Graves .....	G 6/6 1/6 Guadalupe .....	G 3/6 5/7- GS 3/6 5/7-	1/3 1/9 1/6 1/6 1 0 3/6 5/7	1 0 1 0 — 1 0	— 1 0 — —	1 0 0 1 0 0 1 0 0 0 2 0	198,948 100,000 180,000 105,263	Arg. (A.L.) Colombia Honduras Nicaragua	3-5, Queen-street, E.C 10, Blomfield-street 14, Union st. Old Brd		
Javal .....	G 8/ 1/6 Julia Taital .....	G — —	1/6 2/6 —	2/6 1 0	— —	1 0 0 1 0 0	105,234 —	—	39, Cannon-street.			
Lagwarr .....	A 2 2/4 Lautaro .....	N 5/6 6 Liverpool .....	N 8 9	2 2/4 5/6 6 8 9	5 0 5 0 5/ -	Sp.c. Dec. '94 5/- June 26 '96 5/- May 1, '96	5 0 0 5 0 0 5 0 0	120,000 110,000 82,000	Tarapaca Chili .....	3, Gracechurch st; 70, Liverpool		
Loma .....	G 0/0 -/6 London Nit., N .....	G 1/4 2/4 " Nit. (Peru)	N 3 4	0/0 -/6 1/4 2/4 3 4	1 0 3/4 2/4 5 0	— 1/4(d. Nov. '94 1/2 Mov. 23 '95	1 0 0 5 0 0 8 0 0	10,000 30,000 22,000	Colombia Chili .....	5, Calthorpe-building, 9, Gracechurch-st.		
Maceo .....	G 1/ 1/6	1/ - 1/6	2/	—	—	0 2 0	200,000	Peru .....	11, Old Broad-st, E.C			
New Tamarcu N .....	G 5/6 5/6 " 8/ Z. Cum Pref " 8 p.c. Debs ..	5/6 5/6 8/ 8/	5/6 5/6 5/ 5/6	1 10 100 0	Is. Dec. '94 3 p.c. Feb. '95 3 p.c. Feb. '96	1 10 0 1 10 0 10 0 0	130,000 130,103 280,000	Tarapaca	50, Lime-street, E.O			
Orits .....	G 9/ 1/3 Ouro Preto .....	G —	1/0 1/3	1 0	1/- April '94 1/- Feb. '96	1 0 0 1 0 0	30,000 89,000	Colombia Brazil .....	10, Blomfield-street 6, Queen-street-place			
Pac. & Jaxpampa N .....	G 5/6 1 Phoenix .....	G -/3 -/9	5/6 1 1/3 -/9	5 0 1/0 -	4/- May. '95	5 0 0 0 0 0	72,000 400,085	Tarapaca S. Luis ...	3, Gracechurch-st, 3 & 5, Queen Street.			
Quebrada .....	C 5/6 X	X 5/6	5/6 X	3 0	5/ Mar. '92	3 0 0	241,358	Venezuela	36, Nichols Lane.			
Rosario .....	N 4/6 5/6 " (5/ D. B.)	5/6 5/6 1.4 107	4/6 5/6 103 106	5 0 100 0	1/- Aug 13 '96 5/ Apr. 12 '96 5/ July 1 '96	5 0 0 100 0 0 100 0 0	120,000 247,500 220,000	Chili .....	7/4 Old Broad-stree			
St. John del Rey G .....	G 7/6 X San Donato .....	N 7/6 X " Jorge .....	N 7/6 X " Pablo .....	N 7/6 X " Sebastian .....	N 7/6 X Santa Barbara .....	N 7/6 X " El Nio .....	N 7/6 X " Rita .....	c.rts. 13/9 '95 1/6 May 29 '95 7/6 May. 28 '96 5/ Oct. 20 '95 7/1 July 15 '96 1/3 Dec. '96 5/ Nov. 15 '94 1/2 May 29 '96	5 0 0 5 0 0 6 0 0 6 0 0 5 0 0 6 0 0 5 0 0 6 0 0	327,000 32,800 75,000 32,000 29,000 60,000 22,000 22,000	Brazil .....	Pinshy, Bo, Bim'l'd st 18, King-st., Liverp'l 5, Gracechurch-st
Tolima "A" .....	G 4/6 5/6 " " B" .....	G 4/6 5/6 G 4/6 5/6	4/6 5/6 4/6 5/6	5 0 5 0	5/- Mar. 12 '96 5/- Mar 12 '96	5 0 0 5 0 0	14,000 6,000	Chili .....	18, Finsbury-circus			

## PARIS LETTER.

(FROM OUR OWN CORRESPONDENT.)

**Position of the Mining Market.—Renewed confidence in Kaffir's.—Gold mining in Siam.—The Societe des Metaux.—Competition of English coal in France.**

The past week has seen a sudden and rapid recovery in nearly all classes of South African securities on the Paris Bourse. For a long while past the market has been lying under a cloud of depression in consequence of the unfavourable state of affairs in Eastern Europe and in Matabealand. The disturbances in Crete and Macedonia, and the heavy drop in Turkish bonds, were primarily responsible for the persistent weakness of the mining market, and this was, of course largely accentuated by the alarming news that has been from time to time cabled over from British South Africa. Happily all these untoward influences are now disappearing, and while holders of Turkish stocks are beginning to recover some of their wonted confidence, the latest advices from Matabealand show that the situation is greatly improving. The excellent crushing returns have also helped considerably to firm up the Kaffir market, and confidence in the future of the Rand mines has been restored by the apparent disposition of the Boer Government to do something to remove the impediments in the way of the industry. The idea is, indeed, now gaining ground that as Rand mining is being gradually relieved of its heavy burdens it will continue to increase its present marvellous rate of development, and that, consequently, a solid guarantee is afforded of the remunerative character of gold mining scrip. Under these circumstances it is not surprising that the French investor should hope for the best, and should display a willingness to profit from what appears to be the commencement of a permanent revival. In some circles the improvement is being alluded to as a "boom," but this is taking too extravagant an estimate of the situation. In the present temper of French investments it is to be doubted whether a boom is possible. As most of the gold mining shares quoted on the Bourse are of a speculative character, they are very largely under the control of the big dealers, and are, moreover, especially liable to be influenced by reports from the Stock Exchange. During the past few days the "bulling" element has been doing its best to force up prices, but the inflation was too rapid to continue, and directly the more cautious holders began to take advantage of the higher rates to realise at a profit the upward movement sustained a check. This has, however, had little effect upon the tone of the market generally, for speculators are firmly convinced that the improvement will continue before long, and they are quite content to bide their time. Upon investing account purchases of South African shares have been much more freely made during the past week, and there is every indication that the buying of dividend-paying shares will continue with little interruption for some time to come. The approaching settlement is, of course, certain to temporarily check dealings in Kaffir shares, but once the liquidation is over an improvement may be expected to take place all round.

On Thursday the amount of business done on the Bourse was very small, owing mainly to the fact that interest was once more centred in the drop in Turkish securities. This, however, is held to be more favourable than otherwise by arresting any tendency on the part of the public to rash recklessly into mining speculation. Quotations, which had been steadily rising all the week, dropped several points, and transactions took place in only a few of the leading shares. Prices of the principal shares dealt in were as follows:—Buffelsoords, 78 frs.; Goldenhuis, 96 frs.; Chartered, 85 frs. 50c.; East Bands, 125 frs.; Geldenhuys, 96 frs.; Gold Fields, 331 frs. 50c.; Randfontaine, 78 frs.; Robinson Mines, 230 frs.; Robinson Banks, 139 frs.; Shebas, 51 frs. 25c.; and Transvaal Consolidated, 49 frs. 50c. The shares of the Banque Francaise de l'Afrique du Sud are meeting with more favour, in spite of the influence that is being brought to bear against it by certain financial houses. Since the return from the Transvaal of the Vice-president, M. Henrotte, the shares have advanced several francs. The "Bank" has published a very ambitious scheme of operations, which not only comprises a participation in the mining enterprises of the Rand, but also the financing of several industrial undertakings in South Africa, and the sending out of engineers to study the auriferous resources of New Zealand, Colorado, and other gold-bearing countries in different parts of the world. It is reported that the "Bank" has secured a considerable profit upon its dealing in gold mining shares, but as the expenses of organisation are extremely heavy, it is not likely that a dividend will be declared for a long while to come.

The shareholders in the Watana Gold Mining Company evidently think it better to bear the risks they have than fly to others they know not of. The company has entirely failed to fulfil the splendid promises it made at the time of its flotation, and after about three years' prospecting in Siam the results have not come up to anything like expectations. Upon the advice of the mining expert who visited the enormous concession acquired by the Watana Company, the directors have proceeded with their work in an extremely cautious manner, and so far as is known the sinking of shafts and the driving of levels have revealed little of the marvellous stores of gold which the expert believed to exist. It is true that his report was merely a faint echo of the enthusiastic promises of the directors, and his recommendation to prospect upon a large scale before sinking capital in costly plant should have opened the eyes of the shareholders as to the real value of the property. Since then the hope deferred has left them with only a shred of their former confidence in the payment of huge dividends, and so little are they disposed to go to any further expense, that they have jumped at the proposal of the directors to grant prospecting concessions to other bodies. Thus a concession has been given to M. E. Aubert, a Paris lawyer, to prospect during a period of three years over an area of 3000 hectares, which area may be increased later on to 15,000 hectares. If gold be found to exist, M. Aubert undertakes to form a subsidiary company for working the concession, and one-half of the profits will be paid over to the parent concern. This arrangement is held to indicate a strange lack of confidence in the value of the company's property, for if gold existed to anything like the extent that was at first alleged, it would be obviously to the advantage of the company to carry out the work of mining itself.

Though the remarkable incidents in the failure of the old Societe des Metaux to carry out its stupendous "deal" in copper are now a matter of history, the last chapter has yet only just been brought to a close by the termination of the liquidation. Since 1880 the revenue from the liquidation has amounted to 200,377,938 francs, and this has allowed of the payment of a dividend of 50 per cent. A large number of legal proceedings were brought against the company immediately after the crash, and they have resulted in the payment of the following sums:—Oceana and Montana Mines, 75,000 francs; the Old Dominion Mine, 36,380 francs; the Socie de Metailurgiques Taliennes lost its case; the Syndicate de Chine was paid 100,000 francs; Mason and Barry, whose claims amounted to 1,500,000 francs, received 850,000 francs; Rothschild accepted 1,200,000 francs; while the claims of several English companies were settled by the payment of 910,000 francs. Whether it be due or not entirely to the crisis, brought about by the collapse of the Societe des Metaux, it is a singular fact that since that period the prices of copper have never fully recovered from the shock, and it is only lately that anything like symptoms of revival have begun to manifest themselves.

The necessity of supplying the Marine with an abundant reserve of coal is attracting attention just now to the somewhat precarious situation of the French colliery industry. According to the programme of the Minister of the Marine, there ought to be at Toulon a constant reserve of 200,000 tons of coal, but of late this has been reduced to such an extent that it is expected at the end of the year the amount will not be more than half this figure. The contraction is probably due to the fact that owing to the dearness of native

coal the Government is unable to set apart the considerable sum necessary to replenish the stocks. The French battleships do not employ foreign fuel, and the Mediterranean fleet cannot depend for supplies upon the Department of the Nord and Pas de Calais, whence the coal can only be sent to Toulon by boat. Thus the fuel is obtained almost exclusively from the Department of the Gard, but here the industry is being seriously menaced by the competition of English coal, which is delivered at Marseilles at a price much below what the native coal owners can accept. In view of this unsatisfactory position it is feared that many of the collieries in the Gard will have to be closed down, and this is held to constitute an element of national danger. A proposal has thus been made to encourage the colliery industry in the Gard by imposing an import duty upon English fuel, and reducing the transport charges for fuel upon the home railways. Already a great deal has been done in the way of reduced transport tariff, to favour the native fuel in the south-west of France, but there are so many interests involved in placing a duty upon English coal that the proposal is hardly likely to find much favour.

## NEW ISSUE.

## GOLDEN RIDGE (WEST AUSTRALIA) PROPRIETARY COMPANY.

This company has been formed, with a capital of £150,000 in £1 shares, to acquire and work a gold mining property some miles east of the Great Boulder and Lake View Mines, in the East Coolgardie Goldfields, Western Australia, comprising an area of 132 acres or thereabouts, and held under leases from the Government of Western Australia, in accordance with the Goldfields Acts and Regulations. We are informed that the leases are numbered 2310, 2312, 2313, 2314, and 2315, each 24 acres, and 2316 of 12 acres. The vendors, Messrs. Stange and Co., have fixed the price to be paid for the properties at £110,000. Seventy-five thousand shares are to be allotted to the vendors in part payment, 15,000 are reserved for future issue, and 60,000 are offered for subscription. The prospectus states that subscriptions for the entire issue of 60,000 shares have been guaranteed by the vendors.

## REPORTS FROM THE MINES.

## BRITISH MINES.

**DEVON GREAT CONSOLS.—William Clemo, August 27:** All the workings in operation underground are without change since the date of the last report. We are glad to report that some heavy rain has fallen, that four wheels are in full work, and that the water is working very satisfactorily throughout the mine.

**LEADHILLS.—Brown's vein.** Railroad has been laid at Gripp's adit level (south of Wilson's shaft) up to the staff accumulated there, and no time will be lost in clearing same, and the driving of said level resumed on vein worth 35 cts. of lead ore per fathom. There is no important change in any of the different points of operation. Water in mine now down 10 fathoms below the 130 fathom level. Full report will be forwarded next week after setting, &c.

**WEARDALE LEADS.—Report on Weardale Company's mine for the week ending August 22: Groverake Sinking sumpt from 12 fathom level, principally plate-ridges, mixed with a little ore and spar. Tributary ore for the 12 fathom level, 12 fathoms 2 feet per fathom.**

Water in mine now down 10 fathoms below the 130 fathom level.

Driving 44 level east, strong plate and grey beds. — Greenlaw, Rao's drift is not so good to drive, but improved for ore a little, and worth 12 cts. per fathom, stope worth 24 and 18 cts. per fathom. —State Hazel drift east. Driving and stopping east, strong vein, worth 16 cts. per fathom. —Lowe's drift. Strong, sparry vein, poor for ore, worth 8 cts. per fathom, stope worth 10 and 12 cts. per fathom. —B-dling. Driving 64 level east, strong in composed of spar and rider mixed with ore, improved, worth 10 cts. per fathom. Stope above 56 level worth 14, 14, and 12 cts. per fathom. —Killocke. Sinking middle grave shaft in Natrass Gill. Hazel, now down 16½ fathoms below Park level. —Ore raised for two weeks to August 22, 103 tons, ore dressed for two weeks to August 22, 126 tons; ore and slag melted for two weeks to August 22, 220 tons producing 103 tons of ore.

**WEST KITTY.—St. Agnes, Scourier, Cornwall, August 27:** The rise in back of the 54 fathom level west of Reynold's shaft is worth 29 per fathom. The 72 fathom level driving west of Reynold's shaft is worth £7 per fathom. The 60 fathom level driving west of Reynold's shaft is proceeding a little, but not to value. The 60 fathom level driving east of Thomas's shaft is worth £3 per fathom. The 60 fathom level driving west of Thomas's shaft is disordered by a gossan. The shaft men at Thomas's are engaged in cutting plat, and driving a crosscut north at the 65 fathom level. We have 11 stops working, which are worth in the aggregate £121 per fathom, and 11 tribute pitches being worked by 31 men at tributes varying from 5s. 6d. to 13s. 4d. in the £.—(Signed), John Williams, Jos. Hooper.

## MISCELLANEOUS.

**ALMADA AND TIRITO.—Report for the month ending July 25: Drivages.** Ibarras tunnel driving south has been extended a further distance of 21 feet 5 inches by three men, making the total to date 483 feet 8 inches. The 150 fathom level south of Taylor's shaft has been lengthened 10 feet 7 inches, total driven to date 183 feet 5 inches. The lode is mineralized 1 foot, assaying 51 ounces silver per ton. The end in the 150 feet north of Taylor's shaft has improved, and should now yield 14 tons of ore to the fathom. Last assay value 50 ounces silver per ton. A further distance of 19 feet has been driven by three men, making the total to date 175 feet 3 inches. The 150 feet south of Wilde's shaft has a good appearance, and a little ore of good grade is being broken. 17 feet 3 inches has been driven by three men, total distance driven 200 feet 9 inches. The feet north of Wilde's shaft has not improved; 24 feet 3 inches have been driven by three men, making the total 211 feet 2 inches. Taylor's shaft sinking below the 150 feet is again productive, and now carries a small branch of ore of high grade. A further depth of 14 feet 3 inches has been sunk by five men, total depth 28 feet 5 inches. Wilde's shaft sinking below the 150 feet is yielding a small quantity of grade ore and the indication are fairly good. A further depth of 15 feet 3 inches has been attained, total depth 53 feet 4 inches.—Stops. These are still yielding small quantities of good grade ore.

**CENTRAL BOULDER.—Report of the mine manager received August 24:—During fortnight ending June 4 the drive to connect No. 1 and engine has been driven 12 feet, making total length 78 feet. This drive is on the course of the lode, and is a little harder than it has been never the shaft, and is not payable. The contractors abandoned the engine shaft on account of the ground getting very hard. Total depth of this shaft 98 feet. Since the 22nd two men have been employed fixing collar of shaft, whip pole, &c. Will stop all work for the present at engine shaft, and push on with the sinking of No. 1 shaft and the drives. A crosscut driven west of shaft 12 feet is in lode material, thus showing 11 feet wide in the lode, and a fairly good prospect was obtained from the boring in the end. The shaft is being sunk in lode material, and as depth is attained the lode is better defined than higher up. During this fortnight will test the stuff from various parts of the mine.—(Signed) George Gray.**

**CHAFFERS.—The following report, dated July 15, has been received from the company's managers, Messrs. Bowes Scott and Co., Coolgardie:—No. 1 shaft, 55 level, south drive. This drive has been extended 25 feet, making a total of 69 feet. The lode is much broken up. Size of vein 10 inches; pannings poor. 10 inches; pannings poor. We have decided to continue the west crosscut at the 11 feet level in No. 4 shaft. This will be started during the coming fortnight. We have thought it proper to put on more men in view of your instructions that we should do so, in our opinion, it was advisable.**

**GOLDFIELDS OF TIERRA DEL FUEGO.—Extract from progress report received from Mr. Hyacinthe Rouquette, the company's manager in Mozambique, under date July 24: I have been prospecting in the mountains between the Chuia and the Machado River, where we have obtained good looking specimens of grayish-white and pinkish-white quartz, showing gold in the panning. I am pushing on the sinking of the two big shafts on the Meyreles alluvial, and shall get down to bedrock before long. I shall take samples in bulk from each stratum, from which I shall be able to form an exact estimate of its richness in gold. In all the shafts we have found gold from the first spadeful of dirt. As to the method of working the alluvial on a large scale, whether we adopt sluices fixed in the lower part of the property on the bank of the Munene, or whether we bring the water from the higher watershed, it is certain that the situation of the property favours work on a large scale. The claims west and south of the Galia block can be satisfactorily worked with water from the stream which runs through them. There is sufficient fall and outlet.**

**HANNAN'S LAKE VIEW CENTRAL.—The mine manager reports as follows under date July 22: Edols accompanied me yesterday and carefully examined the crosscut on both sides of the shaft, east and west, and reported several good formations, lodes and reefs which must be followed up. On Monday in east crosscut a splendid quartz reef was met with into which they are now driving, but will go on with crosscut. I am having new reef assayed. It looks well. We have done more work in the time on 28 than has been done on any lease on the field I know of. It is necessary now to sink another shaft of 100 feet to carry on on crosscutting, as the crosscut is over 300 feet now. I think we have crossed Lake View lode, but Edols thinks it may only be similar one, and that we shall meet with it in further crosscutting east, however, the property is very good and most promising just now.**

**IMPERIAL WESTERN AUSTRALIAN CORPORATION.—The monthly report just to hand states that the Western Shaw, one of the groups of prop-**

erties owned by this company, is developing very satisfactorily. In reference to lease No. 215 the manager writes:—Have continued driving the level in this shaft, which is about 65 feet. The lode during the driving widened out to 2 feet 6 inches for some considerable distance, and is now about 1 foot wide. Throughout this has been splendid stone, I have about 100 tons at grass, which should go at least 500 cwt to the ton. I estimate to have 300 tons or 400 tons of the same class of stone in sight in the stopes. The lode seems stronger underneath, being no sign of the lode cutting out, and have great confidence in its going down. The new lease recently acquired (late Siffreets) he reports on as follows:—I have started to sink a shaft where a good lot of dollying stones was obtained, and have obtained a little stone carrying heavy gold. The lode promises very well, and is about 2 feet thick. A cablegram received three weeks subsequent to date of above report states that rich ore has been struck on the new lease.

**LYDENBURG ESTATES.—Assay certificates by last mail show the following results:—Mooifontein sample No. 1 19 dwts. 14 grains. Mooifontein sample No. 2 13 dwts. 10 grains. Mooifontein sample No. 3 12 dwts. 13 grains. Mooifontein sample No. 4 11 dwts. Mooifontein sample No. 5 2 dwts 3 grains. Kindergoed sample No. 1 1 ounce 9 dwts. 21 grains. Kindergoed sample No. 2 1 ounce 11 dwts. Kindergoed sample No. 3 1 ounce 9 dwts. 19 grains. Haartebestekvate sample No. 1 7 dwts 17 grains. Haartebestekvate sample No. 2 7 dwts. 15 grains.**

**LILLOOET, FRASER RIVER, AND CARIBOO.—Latest advices from Vancouver state that the wire road tramway for the Lanark properties is being erected. Average assay of concentrates is £57 per ton 2000 lbs. Expect to strike ore body at 4 fathoms level. In the Rossland district the Broadview claim already shows large quantity of ore in sight; average assay shows £17 per ton. Will commence shipping as soon as wagon road completed.—Trail Creek, No. 1 claim. Vein is over 20 feet wide; tunnel already in 145 feet; second lode outcropping on the property. Work is being pushed on at many other of the company's claims in the Kootenay district.**

**PROSPECTORS' ASSOCIATION.—**The directors have much pleasure in supplying their shareholders and the public with the following further information regarding the progress of the association:—La Mascotte Mine, Back Flag District, Coolgardie (W.A.). As reported in circular of May 5, Mr. Hewitt, the association's prospector, discovered a reef formation in the above district, and secured 36 acres for the association. From that time Mr. Hewitt has been prospecting and developing the property, the instructions given by the directors being that the property shall be thoroughly proved and tested.—Mount Marmal Reefs (Limited), W.A. The periodical reports received from the manager are of a highly encouraging nature, the latest report being that an additional reef, varying from 30 to 60 feet in width, has been discovered on the property, but its value has not yet been determined. This, in addition to the five reefs already proved to exist on the property, shows it to be of a very valuable nature. The board are in negotiation with the object of making a public issue of the company at an early date, while in the meantime the property is being worked to the best advantage. The milling and crushing machinery has arrived at Coolgardie, and will be forwarded to the mine for erection. Key of Komata (Limited), New Zealand. This company, which was issued under the auspices of the association, went to allotment on July 31. It is anticipated that the property will be transferred during the course of the next few days. On referring to the prospectus which has been supplied to each shareholder, it will be seen that the property is one of very great value and promise, comprising the large area of 149 acres, the expert reports on which state that no less than eight gold bearing reefs have been proved to exist. The capital of the company for so considerable an area is unusually moderate—namely, £100,000, while the large sum of £100,000 has been reserved for working capital. This association holds a very large interest in the company, and the directors of the association anticipate that a highly satisfactory profit will be derived from this investment. It will be seen from the above that the association is in possession of highly valuable assets, which the board confidently anticipate will yield substantial dividends on the capital of the association. In view of the fact that dividends are payable on the amount paid up on each share, the attention of shareholders is called to the fact that under the Articles of Association any shareholder may pay up the unpaid balance of his shares in full, and thus secure a full dividend on each share on future distributions.

**TOLIMA.—**The company have received advices by the mail of August 22 from their mines, of which the following is an abstract: Price estimated June returns 120 tons fine silver valued at 2s. 6d. per ounce £4611 9s. 1d. ditto east 2329 14s. 9d. ditto profit £1091 5s. 4d. The underground agent reports III fathoms 4 feet 7 inches of ground expanded, of which 97 fathoms 2 feet 2 inches were productive, leaving 17 fathoms 2 feet 5 inches of unproductive ground. The acting superintendent, under date July 17, draws attention to the following points in the underground report:—That the upperances of the lode at engine shaft, the 150 fathom west end, the 140 fathom west end, and the 130 fathom east end presents very promising features, that the 130 fathom west end is being driven in a proto-lode, whilst the sinking of the east wing below the 120 fathom level on the north branch is being prosecuted in productive mineral.—Underground report. Engine shaft was sunk 18½ feet by 18 men on company account, thus being 57½ feet as total depth below the 150 fathom level. This has been going through a very hard and tight bit of ground, yet I am pleased to say that in the present bottom a portion of lode has come into the shaft from the south or footwall side, and same is of aogenous character, and shows up slight spots of mineral, and upon the whole the general aspect seems to indicate that we may expect a further improvement. 150 fathom west end footwall side was driven 10½ feet by two men at 2s 6d per fathom, thus being 170½ feet as total west of the 150 east wing, and the lode has continued to yield slight bits of mineral, and it yet holds promise. 150 fathom west back stop No. 1 was stopped 45 feet by four men at 2s 6d per fathom, and it yielded 3 tons of mineral per fathom. 150 fathom east end was driven 3 feet by two men at 2s 6d per fathom, thus being 173½ feet as total east of the 150 fathom west wing. The lode is lighter to work, but otherwise unchanged. 150 fathom east end bad stop No. 1 was stopped 25 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 140 fathom west end was driven 11 feet by two men at 2s 6d per fathom, thus being 174½ feet as total west of the 150 fathom east wing. The lode has continued to yield slight bits of mineral, and it yet holds promise. 140 fathom east back stop No. 1 was stopped 45 feet by four men at 2s 6d per fathom, and it yielded 3 tons of mineral per fathom. 150 fathom east end was driven 3 feet by two men at 2s 6d per fathom, thus being 175½ feet as total east of the 150 fathom east wing. The lode is lighter to work, but otherwise unchanged. 150 fathom east end bad stop No. 1 was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom east back stop No. 2 north branch was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom west back stop No. 2 was stopped 30 feet by four men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom west back stop No. 3 was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom west back stop No. 4 was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom west back stop No. 5 was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom west back stop No. 6 was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom west back stop No. 7 was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom west back stop No. 8 was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 120 fathom west back stop No. 9 was stopped 30 feet by two men at 2s 6d per fathom, and it yielded 10 cts. of mineral per fathom. 12

## AUSTRALIAN AND NEW ZEALAND.

**ASSOCIATED GOLD MINES OF WESTERN AUSTRALIA.**—Mine manager's report for fortnight ending July 1.—Adelaide Block 102a. Shaft No. 1, 125 feet level crosscut west extended to a total of 22 feet. No change to report in the nature of the ground. Shaft No. 4, sinking below 135 feet level sunk to a total of 26 feet below pit and 161 feet from surface. There is no increase of water, and the shaft is now in more settled country. Have also put in 13 feet of timber.—Australia Gold Block 72a. Shaft No. 2 crosscut extended to a total of 57 feet. Shaft No. 7 sunk to a total of 104 feet. No change to report in the nature of the ground. Shaft No. 7 sunk to a total of 23 feet, and driven 4 feet. Struck lode again at the 29 feet level.—Australia Block 38a. North drive extended to a total of 101 feet 6 inches. South drive extended to a total of 27 feet. Stone in south end carrying 3 ounces of gold per ton.

**BAYLEY'S NO. 2 SOUTH.**—Report received from Mr. W. M. Vivian, mine manager, dated July 22: In reporting for the past fortnight I beg to say that the winze 2 feet has been sunk, making the total depth 23 feet. The reef is only a stringer. At the 100 feet level south 5 feet has been driven, making the total distance from the crosscut 63 feet. The reef shows signs of widening out, but is still very poor in gold. At the 100 feet level north 9 feet has been driven, making the total distance from No. 1 shaft 59 feet. The reef is 12 inches wide, and worth about ½ ounce of gold per ton. At the water shaft the men have been employed in timbering and securing.

**BRITISH BROKEN HILL PROPRIETARY.**—Mine manager's report for week ending July 12.—Backwood shaft, 50 feet level. Uprise from southern section stopes was risen 2 feet, total 47 feet, and connection made with surface. 12 tons carbonate ore, assaying 33 per cent. lead and 3 ounces silver per ton was mined from the overlying stopes in the east vein. The tributaries broke from just above the level 51½ tons averaging 42 per cent. lead and 4 ounces silver per ton, while those below the level mined 94½ tons assaying 40 per cent. lead and 5 ounces silver per ton at 9 feet level. The southern section stopes yielded 683 tons carbonate ore, averaging 35 per cent. lead and 9 ounces silver per ton, all of which was trucked direct to the mill. The uprise of end of long west crosscut was risen 17 feet, total 39 feet.—Howell shaft.

The western crosscut has been advanced 10 feet, total distance from shaft 42 feet.—Wallace's reef. The drive north on the reef has been advanced 5 feet, also three sets of staying timber put in to secure the ground over the level to make it safe for working.—No. 4 shaft: The crosscut south has been advanced 16 feet.—Machinery. Had battery boilers under steam, everything worked smoothly.—Winding engine and pumping machinery. Masonry for winding engine and gear is now completed, engine being in position. Foundations for Cornish boilers are completed and boilers will be placed on them during the coming week, when the completion of the masonry will be pushed on as rapidly as possible. Excavation for bolt pit is finished, and masonry for this will be commenced as soon as possible.

**EMERALD (Reward) GOLD.**—The manager, Mr. A. Davis, under date, Yaigoogoo, July 16, reports as follows, viz.:—Point No. 1, surface. The two men referred to in my last report continue working on same. Leaders a short distance from the Well shaft, but I regret to say I cannot see any appreciable difference in the value of the stones they are raising.—Shaft No. 5. I discovered a small body of quartz here, which appears to carry very fair gold. I am having the stone stopped out and shall mill it along with some stuff from the surface and quartz from the Shamrock all in one crushing, and have only one cleaning up so as to save the unnecessary expense of cleaning up each lot separately.—Point No. 3, shaft No. 10. I have commenced to sink this further 25 feet, but am afraid the water will very shortly prove too much for us with the appliances now at our command. It is making now at the rate of 800 gallons per hour. We have six men here in three shifts of two men each.—Shamrock. Shaft No. 1. The two men here still continue to raise quartz from the stopes referred to in my last report.—Battery. This I contemplate being in full working order early next week, and I hope to be able to start crushing about Wednesday or Thursday next.—N.B. The company's agent at Geraldton advised the purchase of a 22 horse power horizontal engine complete, with large Cornish boiler, winding gear, pulleys, and 45 feet of 8 inch piping, which will be immediately removed from present site and erected on company's property for sinking the new shaft.

**HANNAN'S REWARD.**—The manager reports as follows:—The following work has been done during the week, No. 1 level. Main crosscut east has been driven 3 feet 8 inches, total 11 feet 4 inches. This ground is fairly tight for working.—No. 1 winze has been sunk 2 feet 3 inches, total 74 feet 1 inch. The lode material is still hard, but carries gold in payable quantities.—East crosscut off south drive on main lode. As the rise was blocked up with ore, I employed the man from this rise in driving east at a point on the main lode some 20 feet south of crosscut on No. 5 reef with a view to testing the extent and quality of the lode at that point. This was driven 3 feet 9 inches for the week and the material broken was all good enough to save. The rise has now been cleared and will be continued during the coming week.—No. 2 level. South drive off main crosscut east has been extended 2 feet 9 inches, making a total of 41 feet. The lode in this drive shows a vast improvement, and is widening out every foot driven, proving clearly that the opinion expressed by me that the crosscut east at No. 2 level intersected the lode on the line of fracture or fault, and that we could not tell the width of the lode was a correct one.—No. 3 level. Main crosscut east has been driven a further distance of 11 feet 5 inches, making a total of 121 feet 2 inches.

**HANNAN'S ORO-YA (W.A.).**—Mine manager's fortnightly report to July 15: Oro-Ya (lease 410). Main shaft sunk to total 185 feet. We have struck water, but not in any quantity at present; shall continue sinking to 200 feet before opening out. Lode material just coming into shaft, and which is highly mineralized, will report quality in my next. 107 feet level north drive, extended to total 61 feet, have been in lode formation for the full distance, good payable dirt being extracted. Air shaft sunk to total 23 feet, just an hole through, this will give splendid ventilation for the underground workings.—General. There is no doubt as to our having a first-class mine. It shows that the reef goes down all right, by our having cut it at the present depth in the main shaft.—Royal mint west (lease 532), shaft No. 1. Intend continuing the drive on leader in this shaft on account of it having been discovered in the property south of this, where it has assumed greater proportions than it was when we ceased working at it; probably it will make larger if followed on, and may turn out to be the Mint loe (which may have pinched before reaching our boundary) as there is no doubt that this lode should traverse our property at about this point.—Prospecting shaft No. 1. Western crosscut extended to total 26 feet. Prospecting shaft No. 2 sunk to total 65 feet. Expect good results as depth is attained.—Machinery. The winding plant is expected to arrive at the mine very shortly.

**HARRIETVILLE.**—Fortnightly report of Mr. E. G. Davy, superintendent, dated July 17:—Tiddie Mine. Biddy's new lode. Drive north of 150 feet below the surface on footwall vein advanced 15 feet. The vein is 18 inches wide and valued at 2 ounces of gold per ton. Gold is freely visible in the stone. Rise at back of same level advanced 19 feet. 14½ inches wide and valued at 1 ounce per ton. All the ore passes are now ready, and we shall resume crushing in a few days.—St. Bernard Mine: Drive south of Pensyvanian shaft towards auriferous vein extended 51 feet. Ground firm but favourable for driving.

**HAMPTON GOLD HILL.**—The directors of the Hampton Gold Hill Mines (Limited) have received the following address from the manager at the Northmore Mine, Gibraltar, near Coolgardie (in which they hold a fourth interest), Mr. Spencer Moore, under date of June 30. We have put in a platform in our eastern No. 1 shaft at 50 feet, and are driving south for the De Beer's lode. The drive is now 23 feet long and the stuff is improving, and judging from prospects in the panes we are close to the lode. Should we strike it within the next few feet we shall, in all probability, be able to demonstrate the presence at this end of the leases of a very large quantity of lode stuff yielding payable gold. Anything very rich at the present depth is not to be looked for. Our main shaft is now down about 70 feet. Hitherto only a very small quantity of gold has been visible in panning off the ore at various depths in this shaft, but we are hoping for a change of country very soon, where there are good prospects of getting at payable gold. We have been in some doubt as to whether the gold in this ore may not be in some form which will not show up in the pans, and consequently are having a sample from the 60 feet level assayed at Perth by the Government assayer. This will be a guide to us. On the north side of the lease we have a big cement lode, similar, we are told, to the White Feather cement so much talked about. An assay of this at Perth gave 16 dwts. 2 grains per ton, thus showing gold at the top of the lode in payable quantities. We have sent two more samples of this cement to Perth, and if results are satisfactory shall at once begin sinking a shaft upon it. A mining engineer, who saw the lode the other day, said that if it went nearly 1 ounce all through it would be one of the biggest things in West Australia. On the north-west side of the lease we have exposed what looks like a good lode. An assay by the Government assayer of some surface stuff near this supposed lode gave 4 dwts. 21 grains of gold per ton—a sufficiently good indication to go down upon. I shall do some work here in the next few days. We have sent two samples of this ore to Perth for assay. They were taken from a depth of 4 feet from the surface. I have discovered an ironstone hill with auriferous quartz and other strata. Some of the stuff has been sent to Perth for assay. The best gold on the De Beer's lease has just been struck at 150 to 170 feet showing that the gold goes down. Machinists are coming up to work this lease, and when this is in operation the value of our ground will be enhanced. Both the De Beer's and Easter Gift mines near our lease are developing well. I am in hopes of being able to cable good news very soon.

**JOKER (Yaigo).**—Mine manager's report for fortnight ending July 10: Miners' right lease, Shaft No. 6. Driven since last report (June 26) to the south-east in supposed hanging wall 19 feet, commencing at the 75 feet level a. the above shaft. So far it is purely a lode formation, and I will still continue sinking on this reef which is lying on a footwall of schist and decomposed ironstone and quartz.—Water shaft No. 5. Shaft since last report 17 feet, its total depth is 106 feet, still in fairly good sinking. The water is steadily increasing, and a change is coming in the lower strata. If the water does not come faster this week I will drive towards the main bar. Sunk 22 feet below the water level of the Queen of Spades water shaft, so that if the water does come in quite it will in all probability save sinking to any further depth.—Costen, S. S. last report two miners stripping and co-tunneling reef, which is showing fine gold, running east and west, and no doubt underlying towards the main lode. Being very fine class of stone, intend taking it all out of this reef to assist in cutting away the much softer ore in main lode when crushing. Trenched 10 feet by 8 feet wide by 7 deep. Taken about 4 tons of ore for sample test.—Joker lease, south drive No. 1. Driven since last report 5 feet on a slight downward course. Total distance 43 feet; still going south. This band is widened to about 6 feet of formation with the gold distributed through it. North drive No. 1 discontinued for a time and recommenced main underlay shaft to meet vertical shaft, when met this drive can be worked to better advantage. Open cut. Still being worked until the vertical and underlay shafts meet, then all ore will go to one centre from each working, thence to the mill. Shaft No. 4 sunk since last report 7 feet, total depth 28 feet, still showing fine gold. Shaft No. 3 sunk since last report 7 feet, total depth 27 feet, going very slow owing to hard nature of formation, but like the other sinking will change as it gets down. Shaft No. 1 (main vertical) sunk since last report 10 feet, total depth 123 feet; country changing to a better kind of lode formation; water steadily increasing, but I am trying to get down to connect the two shafts.—Shaft No. 2 (the underlay) sunk since last report 12 feet, total depth 124 feet. Still following down the one band of ore.—Queen of Spades lease, I am putting in the frame sets in readiness for pipes of pumping gear in No. 3 water shaft, also erecting assay building which is well on the way. Number of miners employed 22. Ore at grass last report 1840 tons. Ore raised since last report 140 tons. Estimated assay value will be given when assay gets to work. (Signed) W. J. Ward, mine manager.

**LAKE VIRE SOUTH GOLD MINE (W.A.).**—Mine manager's report for fortnight ending June 17: Main shaft sunk to total 202 feet. This shaft is now down to where we will open out for platt, will continue to sink for fortnight in order to have a well under the plat. 10 feet of timbering put in, also started set for plat.—Battery. Work is being pushed on as fast as possible. Condenser is now completed, and giving every satisfaction, which will be a great saving to the company.—Mine manager's report for fortnight ending July 1: Main shaft sunk to total 212 feet. After sinking for another week in order to

a supply of air to carry this and the east crosscut also to a distance of 151 feet each, thus proving 300 feet of ground. The remainder I shall prove from the Crosscut south shaft, and from the shaft to be sunk on the continuation southward of the find in Block 45. The discoveries in the crosscuts will be opened out upon and tested in the order of their importance at the point of discovery.—Leases 13 east and 302 east. Bayon on an occasional day's prospecting I have done no work during the last half year on leases 13 east and 302 east, but have obtained exemption from working on them in order to concentrate the labour on lease 91 east. As regards the payable extraction of free gold from its matrix I have as far observed no methods on this field so economical as a good stamper battery of the latest Victorian type. Water is being obtained in quantities sufficient for battery purposes at about 1½ mile east from this mine at a depth from 150 to 200 feet.

**EAST MURCHISON UNITED.**—Extracts from mine manager's report dated June 13: Great Eastern. The main shaft has been sunk 37 feet for the fortnight, total depth 79 feet from surface. At 76 feet water was met with, but up to the present it has not materially interfered with sinking operations. I intend crossing at 66 feet from the surface, that being the water level.—Gibbons reef. Shaft A has been sunk 56 feet for the fortnight, but have obtained no work during the last half year on leases 13 east and 302 east, but have obtained exemption from working on them in order to concentrate the labour on lease 91 east.

As regards the payable extraction of free gold from its matrix I have as far observed no methods on this field so economical as a good stamper battery of the latest Victorian type. Water is being obtained in quantities sufficient for battery purposes at about 1½ mile east from this mine at a depth from 150 to 200 feet.

**LONDON AND WESTERN AUSTRALIAN INVESTMENT.**—The following information has been received by mail from the company's managers in Western Australia:—Water rights at Hannan's. A competent engineer has now been engaged to superintend the contractors, who are sinking shafts to a depth of 130 feet. From that depth a bore will be put down in each shaft. The three shafts are estimated to make at least 25,000 gallons of water per day.—Ascot Estate. The stables on this estate have been successfully let at a high rental. The Ascot Hotel is being built, and will give a high return upon the capital outlay. The hotel will fill a very much felt want.—Cub buildings at Ogduridge. These are being rapidly completed, and the accommodation is in great demand. They promise to prove one of the most profitable of the company's properties.

**LONDON AND WESTERN AUSTRALIAN EXPLORATION.**—The following information has been received by mail from Messrs. Alex. Matheson and Co., the company's managers in the colony:—Block 48 Hampton Plains Estate. Further prospecting on this block has resulted in a 25 acre block being pegged out which shows two parallel reefs. A cooteen exposes a nice looking body of quartz about 2 feet in width, which appears to be making as it goes down.—Louis D'Orleans. These are being actively developed and have excellent prospects. No. 1 shaft has been sunk to a depth of 50 feet. Drive south extended 17 feet.—No. 3 shaft. The western crosscut has been advanced 10 feet, total distance from the shaft 42 feet.—Wallace's reef. The drive north on the reef has been advanced 5 feet, also three sets of staying timber put in to secure the ground over the level to make it safe for working.—No. 4 shaft: The crosscut south has been advanced 16 feet.—Machinery. Had battery boilers under steam, everything worked smoothly.—Winding engine and pumping machinery. Masonry for winding engine and gear is now completed, engine being in position. Foundations for Cornish boilers are completed and boilers will be placed on them during the coming week, when the completion of the masonry will be pushed on as rapidly as possible. Excavation for bolt pit is finished, and masonry for this will be commenced as soon as possible.

**EMERALD (Reward) GOLD.**—The manager, Mr. A. Davis, under date, Yaigoogoo, July 16, reports as follows, viz.:—Point No. 1, surface. The two men referred to in my last report continue working on same. Leaders a short distance from the Well shaft, but I regret to say I cannot see any appreciable difference in the value of the stones they are raising.—Shaft No. 5. I discovered a small body of quartz here, which appears to carry very fair gold. I am having the stone stopped out and shall mill it along with some stuff from the surface and quartz from the Shamrock all in one crushing, and have only one cleaning up so as to save the unnecessary expense of cleaning up each lot separately.—Point No. 3, shaft No. 10. I have commenced to sink this further 25 feet, but am afraid the water will very shortly prove too much for us with the appliances now at our command. It is making now at the rate of 800 gallons per hour. We have six men here in three shifts of two men each.—Shamrock. Shaft No. 1. The two men here still continue to raise quartz from the stopes referred to in my last report.—Battery. This I contemplate being in full working order early next week, and I hope to be able to start crushing about Wednesday or Thursday next.—N.B. The company's agent at Geraldton advised the purchase of a 22 horse power horizontal engine complete, with large Cornish boiler, winding gear, pulleys, and 45 feet of 8 inch piping, which will be immediately removed from present site and erected on company's property for sinking the new shaft.

**MOUNTAIN CONSOLS.**—The following report has been sent out to the shareholders:—I beg to inform you that the mill started crushing in June last, and since then the result of the first two crushings have been announced as follows, viz.:—The first crushing was 275 tons, yielding 1273 ounces 12 dwts. of gold, and an average assay of the tailings gave 15 dwts. per ton. The mill ran 246 hours. The average yield of the tailings was therefore 4 ounces 13 dwts. per ton, exclusive of tailings. The second crushing was 293 tons, yielding 1422 ounces 12 dwts. of gold, and an average of the tailings gave 17 dwts. per ton. The mill ran 284 hours. The average yield of the ore crushed was, therefore, 4 ounces 18 dwts. per ton, exclusive of tailings. The reports from the mine manager as to the condition of the mine are most satisfactory. He also states that as soon as the additional pumps arrive, and are in position (which is expected to be very shortly), he will be able to more effectively cope with the mine water, and this will have the immediate effect of increasing the quantity of quartz put through the mill. He will also be able to resume sinking below water level. In reply to an enquiry by the board, Mr. C. Kaufman, the consulting engineer, cabled yesterday as follows:—The mill is running splendidly, and the mine looking better than ever.

**MENZIES GOLD REEFS PROPRIETARY.**—The following circular has been sent round to the shareholders:—With a view of keeping the shareholders informed as to the development and prospects of the various leases owned by this company, I am instructed by the directors to give you the following extracts from the latest reports received from the manager at the mines, under date July 11, viz.:—Friday lease, A shaft. Have extended west crosscut at the 277 feet level a further distance of 6 feet, total from shaft 65 feet. 4 feet of this driving have been through formation carrying layers of mineralised stone, but of poor quality. We are now starting to drive south on the course of the lode. We have more water than usual coming through the end of the crosscut. Have extended No. 2 south level a further distance of 11 feet, total from shaft 125 feet, reef averages 15 inches 2 ounces silver. Have continued stopping over this and the north level, reef averages 1 foot good stone. The stopes over No. 1 north and south levels show an average of 10 inches 1½ ounces silver. We have not done any sinking in winzes from No. 2 south level, owing to a considerable increase of water, now fully sufficient to supply all our boilers. Shall not sink winzes any further until we get under it with the south level from the bottom crosscut; hauled 120 tons for the fortnight.—No. 3-foe lease. Have driven the north level a further distance of 9 feet from the underlie shaft. The total is 112 feet, and the reef averages 2 feet, very poor quality. Lady Shenton No. 1 lease. I have started two men to sink a straight shaft in what I consider the best position to prove the value of the several reefs that are running through this lease. I intend to sink the shaft to a depth of 80 or 100 feet, and then crosscut to intersect the reefs; have sunk 5 feet.—Crosscut lease to south of Lady Shenton No. 1. Sunk the underlie shaft a further depth of 9 feet, total 80 feet from surface. As there was no change for the better I started the men to sink another vein a short distance east of the shaft. There is about a foot of stone to start sinking on, some of it showing gold.—Selkirk lease. I have started men to sink a shaft in what is undoubtedly the Sherry reef. This reef outcrops the whole of your lease. Where we have started sinking there is about a foot of stone on the footwall, and 10 inches in the hanging wall with 4 feet of nice mellow formation. The stone carries gold but is not yet payable. I intend to get a nice handy blacksmith's shop and store erected on both this and the Lady Shenton No. 1 lease. The following table gives the crushings to date, viz.:—Clean-up No. 1, 100 tons crushed, yield 210 ounces retarded gold. Clean-up No. 2, 5 tons crushed, yield 150 ounces retarded gold. Clean-up No. 3, 175 tons crushed, yield 357 ounces retarded gold. Clean-up No. 4, 120 tons crushed, yield 212 ounces retarded gold. Clean-up No. 5, 210 tons crushed, yield 413 ounces retarded gold. Clean-up No. 6, 210 tons crushed, yield 410 ounces retarded gold. Total 855 tons crushed, yield 1807 ounces retarded gold.—Monthly clean up. In order to avoid the loss of time consequent upon the fortnightly clean up, the board decided that this should only be done once a month. It is anticipated the tonnage crushed monthly may be hereby considerably increased. On the other hand (from latest information) it would appear that the stopes are at present turning out ore of poorer quality than heretofore.—Tailings. Samples of the tailings have been sent for trial with a view of increasing the extraction. Arrangements are being made for a trial on practical scale of a process of tailings by the cyanide (McArthur Forrest) process.—Complaints. Owing to recent decision, it has been decided to fully "man" all the leases. The director have adopted a vigorous policy as regards the development of the leases belonging to this company, more particularly the Lady Shenton No. 1 and the Selkirk. Both these leases, the one to the south and the other to the north of the Friday lease, are excellently placed, and afford considerable promise for the future.—General. The company, after paying an interim dividend of 10 per cent., has still cash at the bank amounting to £11,400, and in addition, shares in the various concerns with which it is associated, viz., the Menzies Croesus Gold Claims (Limited), the Menzies Consolidated Gold Mines (Limited), and the Menzies Waterworks (Limited), aggregating £1,400 £1 fully paid share.

**MENZIES GOLD ESTATES.**—Extracts from mine manager's report, dated July 13: Aurelia, south shaft. In the 125 feet level south of the reef measures 18 inches wide, and the formation 2 feet. There is a very strong formation in the north drive with small streaks of quartz scattered throughout. The 73 feet level south from No. 1 shaft (Aspasia Mine) is now in 114 feet. The reef is about the same in size as it was last week, but it does not assay so well; it will no doubt improve in value again further ahead. The length of level is now 114 feet. The driving north in 77 feet level (No. 2 shaft) was resumed the beginning of the week, and since the level has been extended 10 feet. A sample of the quartz taken out for the distance driven assayed 1 ounce 3 dwts. 23 grains. The quartz and formation measured 4 feet 6 inches, and the ground is easy for drifting.—Cleone. No. 1 shaft is now down 82 feet, and the ground is getting firmer than it has been for some time. The shaft is now timbered and sinking can be carried on to great depth.—Stranra. The depth of main shaft is 61 feet 6 inches. The ground is without change since last report.

**MCKENZIE.**—The following report has been received from Mr. D. W. Welch, the mine manager.—McKenzie-Glenloth, July 20. Report of crushing, 104 tons crushed for 155 ounces 2 dwts. smelted gold, which includes 9 ounces 12 dwts. from skinning, &c. Have since retorted all the mercury we had in use at battery for a yield of 3 ounces 10 dwts. 21 grains smelted gold. Both bars of gold have been lodged in the Bank of Australia for assay, the bank advancing £2 10s. an ounce on the gold. The tailings for the crushing averaged 15 dwts. 5 grains per ton, which I feel sure could be reduced with good clean water.

**MOUNT LYELL MINING AND RAILWAY.**—Engineer in charge of mine reports, July 10:—No. 1 tunnel north drive. Distance driven for week 3 feet, total 53 feet. No change.—No. 3 tunnel main crosscut. Distance driven for week 6 feet, total 313 feet. No change.—No. 4 tunnel south drive. Distance driven for week 6 feet, total 528 feet. No. 4 tunnel south drive No. 3 crosscut. Distance driven for week 3 feet, total 51 feet. No. 4 tunnel south drive No. 2 rise. Rise is being put up 4 feet for week, total 41 feet. No. 4 tunnel south drive No. 3 rise. High grade ore has been stopped at this rise during the week.—Surf on No. 1 bench. The stripping of overburden has been continued during the week.—No. 2 bench. Good ore has been broken along the whole face, and sent down to bins.—No. 3½ bench. Stripping of overburden has been carried on at this level. A drying shed for men in open out workings has been erected at No. 3½ bench.—Progress report for week ending July 10. Smelting plant. No. 2 blast furnace provided with slag race which works successfully and running without interruption, scaling up to 200 tons of ore and fluxes daily, with ordinary speed.—Convector plant. Treats from blast furnace, slag dump nearing completion, laying foundations for main posts and walls of building. Weather, heavy snowfall recently.—Superintendent railway engineer reports week ending July 11. The beams and transoms of the Queen River bridges were completed on Thursday, 9th Inst

This will continue to a depth of 100, when we will break down the reef and ascertain the value and width of stone at that level, being 200 feet on the underlie of the lode from the outcrop.—Main tunnel. This has been extended an additional 13 feet, making its total length 135 feet. At that point the hanging wall was reached composed of hard diorite, the lode formation about 4 feet wide being quartzite and schist. Have started driving northwards on the course of the lode, and do not expect any change in the formation for the next 200 feet, as we have to go through the same dyke as that already penetrated by the Sydney adit. The ground is good, and steady progress will be made.—Hardy Norsman. Little or no work has been done in the main shaft during the fortnight, on account of continuous rain making it impossible for the horses to pull up the stuff. The men employed therewith have been utilised in the main tunnel, and in starting a winze in the Mildura. As the weather is now improved, the widening and timbering will be resumed.—Air shaft. This has been sunk 25 feet, making its total depth 50 feet. The disturbed country mentioned in last report has been gone through. The reef at the present bottom is strong and of payable quality, similar to that in the main shaft. We are testing it by drill holes.—Mildura. The men engaged in this shaft have been employed fixing the opening out sets on the north side, which is completed, and are now driving south about 20 feet on contract. When finished sinking will be resumed. The lode in the south drift is fully 6 feet wide, of good quality. At a point 80 feet north a winze has been started, which has been sunk to a depth of 10 feet. The stone at the bottom is 4 feet wide, and of the same quality as above.—Viking. The north drift has been extended 19 feet, total 142 feet from shaft. The reef at the present face is 4 feet wide, quality maintained. About 43 feet more driving will reach the boundary of the United Scotchman—a most desirable property to secure if it could be obtained at a reasonable price.—John Morgan.

OCTAGON EXPLORERS.—A report has been received from the mine manager stating that the lode has been cut in the east crosscut at the 115 feet level of the Union Jack lease. The lode, which has not yet been cut through, shows 2 feet 6 inches, with good prospects in the hanging wall. Assays are now being made from bulk samples. It may be mentioned that this property was recently purchased by the Octagon Explorers (Limited).

QUEEN CROSS REEF.—Manager's report for fortnight ending July 7: The No. 1 drive east has been driven 5 feet, total from shaft 175 feet. This drive has improved a little since last report, the formation is better and carries about 9 inches of fair quality stone. The stopes over this drive keep about 20 inches of good quality stone. The No. 2 east has been driven 8 feet total from shaft 75 feet. There is a new splice of stone showing about 4 inches thick. The stopes over this drive average 2 feet in thickness of good quality. The winze in No. 2 west has been sunk 13 feet, total from drive 13 feet, carrying 2 feet of good quality stone. The underhand has been sunk 14 feet, total from No. 2 plat 45 feet. The shaft looks well and averages 2 feet of good quality stone, showing gold freely. We knocked off three days during the fortnight to clean out the boiler and do other necessary work to the engines and pump. Started to crush at the Fair Rosamond mill on June 29. There has been 185 tons taken to the mill. The quantity of stone raised for the fortnight is 120 tons, leaving 310 tons in the paddock.

TAMWORTH GOLD.—The following report has been sent out to the shareholders, signed by the secretary:—Since my last circular, dated June 3, the directors have received telegraphic information that 135 ounces of retarded gold have been recovered, but the total tonnage crushed is not stated. It appears, however, from letters recently received that the yield averages 4.25 ounces to the ton. Added to the 200 ounces already announced, the total yield is 395 ounces. The manager states that he is only able to run the battery six hours at a time, and then with only five stamps, as it is found that the reverberations of the heavy stamps constantly tend to bring down more of the slips (from which we have already suffered), whilst the ground is so loose and wet as it is at present. He trusts that when the dry hot summer weather sets in the ground will harden and settle together, and that he may then be able to make everything safe. The reef which was struck on July 14 is 3 feet wide, and is widening out. It shows free gold all over the stone, and is making directly into the untouched two acre block, which the original owner of the reef always said would turn out the richest. Dr. Pratt, our local director, in his letter of July 13, writes:—If it were not for the state of the slip behind the battery I should have been able to give you really good returns by this time, as the mine itself is improving all the time, and even under the great disadvantage we labour under, as to the impediment to work, and danger to the battery, I do not think it will be long before I shall have the pleasure of placing the directors in a dividend-paying state.

TRUE BLUE (Hannan's).—Mine manager's report to July 21: Shaft A. This shaft has been sunk a further depth of 7 feet, total depth from surface till 137 feet. The ground continues hard, which has made progress slower than I expected; in another 40 feet of sinking we should strike water. When the present party of contractors have timbered up their section, I shall invite tenders for another 50 feet of sinking.—No. 1 vein. We have risen on the vein 10 feet, and carried a stope over the back of the level 6 feet north and south of the raise. The vein in the back is 10 inches in thickness, and shows a little gold.—No. 2 vein. The south drift has been extended 23 feet, total distance driven from X A 133 feet. The vein is about 10 inches in thickness, and the formation broken. I have to-day commenced to drive north on the formation.—No. 3 vein. The south drift has been extended 29 feet, total distance driven from X A 133 feet, with no chance to report. Shaft B. X. B. 2 has been extended 40 feet, total distance driven from the shaft: 17 feet. The lode for that distance is 18 inches in thickness. The last breaking down showed colours of gold in the stone. The south drift has been driven 9 feet on 18 inches of lode, and lode formation of poor quality.—Battery. The ore from the south drift, No. 1 vein X A. 1, is being carted to the mill, and I hope to commence crushing this week.

VICTORIA AND QUEEN.—Manager's report for fortnight ending July 7:—Have driven the No. 4 drive a further distance of 10 feet, making total from draft mark 132 feet 6 inches. The reef is about 8 inches of good mineral stone. The underhand stopes average 15 inches. The winze in No. 3 crosscut has been sunk a further depth of 14 feet, making total 84 feet. The reef is about 1 foot in thickness making in the footwall, of very fair quality stone. The winze in the underhand has been sunk a further depth of 14 feet, making total of 75 feet. We are at the surveyed depth on east side to strike Craven's reef, and have the men now engaged in stripping down the hanging wall to try and strike it. Have driven No. 3 drive a further distance of 6 feet, making total 230 feet. Have stopped this, as found it was going too much west and would not give us any backs to work on. The winze in No. 3 has been sunk a further depth of 5 feet 5 inches, making total 58 feet 5 inches. The underhand stopes in the intermediate drive No. 3 average about 1 foot of fair quality stone. The reef in licks No. 1 is about 1 foot. We are saving this stone by itself for a trial crushing. Have hauled during the fortnight 100 tons, making a total of 380 tons at grass.

VICTORY (Charters Towers).—Mine manager's report for fortnight ending July 11: No. 2 shaft. During the past fortnight the 320 feet level has been driven east a further 12 feet, present length of this drive 412 feet. There is no change to report here. No. 7 level has been driven a further 3 feet, total 352 feet. There are several veins of stone showing in the face of this drive, some of them carrying fair mineral. They are small at present, from 1 to 4 inches. There is great improvement here the last few days. In the rise at No. 1 A the reef is small, from 3 to 10 inches, and during the last fortnight we have had a good piece of blank ground here; 6 tons have been hauled from this shaft during that time, total at surface 40 tons.—No. 3 shaft. Have got the trucks working here, and everything is working all right. During the fortnight we put in the guides, laid the double track road from straight shaft to bottom of underlay; this has been sunk 8 feet, making the present depth 275 feet. There is 3 inches of reef showing in the present face. No. 2 level has been driven east a further 10 feet, total 90 feet. About 8 inches of reef showing in the end fair quality; this level has also been driven west 6 feet, present length of this drive 56 feet. About 6 inches of reef, showing in this end rather white-looking at present. The winze in No. 1 east has been sunk 10 feet for fortnight, present depth 16 feet, 15 inches of reef in bottom, good quality. The stopes at the back of this drive are carrying a reef that will average 12 inches, quality good. There has been 38 tons hauled from this shaft for the fortnight, making 180 tons towards present crushing.

WATER TRUST, MINING, AND PUBLIC CRUSHING.—The following report is to hand upon the New Victoria South Mines recently taken under lease by this company: Block 2635, 80 feet level. Drive very much improved in size and quality. Has bagged several lots very rich stone. Reef has every appearance of being very larger and even richer than at 35 feet level. From the latter splendid specimens are to be seen after every breaking down of the quartz. 20 tons stone at grass. Block 2021. Shaft down 27 feet. Reef widening, quality of stone very good, showing coarse and fine gold.—Block 2877, Shaft down 32 feet. Reef looking very good. Shows coarse and fine gold throughout. 20 tons now at grass. The company's general manager cables that a trial crushing of 100 tons of ore is being made at the local mill, the result of which will be announced.

#### INDIAN.

BALAGHAT-MYSORE.—Thomas Richards: Report for the fortnight ending August 1. Ogle's shaft. The 410 feet level south from the crosscut east has been driven 14 feet 6 inches, total distance 33 feet 6 inches. Quartz 4 inches wide, assays 2 dwt., 15 grains of gold per ton. The crosscut east at this level has been extended 10 feet, total distance 44 feet 5 inches. No further portion of the lode has yet been met with. Haines' shaft. The 410 feet level north has been driven 9 feet 6 inches, total distance 213 feet 6 inches from the shaft. Lode 4 feet wide, assays 2 dwt., gold per ton.

MYSORE.—H. Hancock. Mining operations for the fortnight ending August 2: Rowse's shaft 1450 feet level north of the crosscut west. The winze in the bottom of this level has been sunk 12 feet, making a total depth of 14 feet, the lode is 1 foot 5 inches wide, assaying 1 ounce. The lode in the stopes in the back of this level is 1 foot 6 inches wide, assaying 1 ounce 3 dwt., 6 grains.—1450 feet level north of cump winze. The crosscut east from this level has been driven 14 feet, making a total distance driven of 103 feet and intersected Crocker's quartz. The machine has now been put to drive north on the chute. There are three stopes in the back of this level, the average width of the lode being 4 feet, giving an average assay of 12 dwt., 18 grains.—1450 feet level north of crosscut Ogle's east. This end has been driven 10 feet, the lode is 4 feet 6 inches wide, assaying 1 ounce 17 dwt., 1350 feet level south of crosscut. This level has been driven 14 feet, making a total distance driven of 405 feet 5 inches. The lode is 1 foot 6 inches wide, assaying 1 ounce 3 dwt., 6 grains. The winze in the bottom of this level has been sunk 12 feet, making a total distance driven of 73 feet. The lode is 3 feet wide, assays 1 ounce 6 dwt., 9 grains. There are six stopes in the back of this level, the average width of the lode being 1 foot 3 inches, giving an average assay of 12 dwt., 15 grains.—1450 feet level north of crosscut. The lode in the stopes in the back of this level is 2 foot 4 inches wide, giving an average assay of 12 dwt., 16 grains. The rise in the back of this level has been put up 10 feet, making a total height of 72 feet. The lode is 4 feet wide, assaying 2 ounces. Driven 12 feet, making a total distance driven of 15 feet. The lode is 6 inches wide, assaying 3 dwt., 6 grains. There are three stopes in the back of this level, the average width of the lode being 1 foot 4 inches, giving an average assay of 12 dwt., 1 grain.—1150 feet level north of crosscut. This end has been driven 14 feet, giving a total distance driven of 135 feet 6 inches. Quartz 2 dwt., 12 grains.—1150 feet level north of crosscut. There are two stopes in the back of this level, the average width of the lode being 1 foot 5 inches, giving an average assay of 12 dwt., 7 grains.—1150 feet level north. There are four stopes in the back of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 15 dwt., 7 grains.—1150 feet level north. There are two stopes in the back of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 12 dwt., 12 grains. The rise in the back of this level has been put up 10 feet, making a total height of 72 feet. The lode is 4 feet wide, assaying 2 ounces. 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115 feet, having cut the shoot of mineral standing north of west from Bawden's, and at the forshore we have still a very masterly shoot of mineral. The force here is engaged taking up the bottom of level and fixing tramroad. No. 3 drive is now being driven to cut the new shoot 28 fathoms south of the No. 2 from off Bawden's, and being driven on the course of lead.

## AFRICAN.

ANGLO-FRENCH (COLONIAL) MINING TRUST.—London agents of Royal Sovereign Gold Mining Company (Limited), 25-Mile, West Australia, report as follows for week ending July 15:—Main shaft has been sunk a further depth of 7 feet, making total 177 feet. The ground in the bottom of the shaft is much softer than when I last reported and is lode formation. I think we shall get something very rich shortly, as we have found good gold in everything we have passed through.

EARL NIGEL.—The following is the report of Mr. Banon, the company's manager, for the fortnight ending August 1:—No. 3 incline has been sunk a further depth of 10 feet during the last two weeks, making the total depth of 110 feet. The drive has been driven a further 7 feet, making a total length of 37 feet. We have encountered large masses of hard white quartz in the drive, mixed up with the shale, which has made the progress a bit slower. The reef is growing larger in the drive. We are leaving it on the hanging wall intact. The reef in the shaft is looking very well, but we have been leaving intact pending the arrival of our consulting engineer, who will probably sample it thoroughly on his arrival. We are now cutting out No. 2 incline and putting in sets of timber, when we shall resume sinking. The erection of the battery is going on satisfactorily.

HARMONY.—Under date July 30, the mining manager at Leydsdorp writes: You will be glad to hear that the commissioners are expected here in a few days to select the best route for the Slati Railway to Leydsdorp, as three different routes have been surveyed. The Government is anxious to have everything ready to proceed with the construction work immediately the case is decided by the High Court. Some thousands of claims have been pegged out during the last few weeks on behalf of Johannesburg men waiting for the railway to start, and it is almost impossible to find any open ground between the Harmony Gold and Land Company's eastern boundary and Castle Kopje, a distance of 41 miles by 8 miles broad.

LEYDENBURG (Transvaal).—The manager (Mr. A. J. Woodburn) writes under date July 30 as follows:—Dolomite seam. Work on this seam at outcrop No. 1 continues to be pushed on at all possible speed. No. 1 drive having now reached a distance of 135 feet from the surface. The seam averages 12 inches thick at the bottom and 3 inches at the top. No. 2 drive is in a distance of 13½ feet, the seam here measuring 9 inches at top and 3 inches at the bottom. Wakkersdal. Some workings on the Upper Dolomite seam are being opened up, at which point the seam measures fully 18 inches.

LEYDENBURG ESTATES.—The latest advices from the prospectors are as follows:—Moofontein. Have found a large outcrop of white quartz of like nature to that on Lindenau. I took away samples which show a return of 13 dwt. 19 grains. The outcrop is fully 20 to 30 feet wide. Another sample taken from the entrance of No. 2 drive in the gully, as near as possible to the spot from Mr. Davies took his samples, assayed 19 dwt. 4 grains. Hartbeespoort. I am working along the outcrop on this farm, and the assay of samples shows an average of 7½ dwt. I have a new find of which I have great hopes. Kringendal. I took a piece of rock from which appears to be a fair sized outcrop, the average assay of which was 1 ounce 10 dwt. This is most satisfactory.

VAN RYN GOLD MINES ESTATE.—Report on operations for month ending June 30: The Mines. General manager reports: Mine No. 4. Driving fourth level 100½ feet May, 37 feet June. Driving second level 16 feet May, 138 feet June. Fourth level main shaft winze 13 feet May, 20 feet June. Second level intermediate 28 feet May. Fourth level first winze west 18½ feet May, 37½ feet June. Fourth level first winze east 27 feet May, 25½ feet June. Fourth level rises on leader west 68½ feet May. Fourth level third rise west main reef 2 feet May, 85½ feet June. First level crosscut to rise on leader 7½ feet June. Fifth level stations and west 35 feet May. Second level third rise east 18 feet May, 52 feet June. Second level pithole 21½ feet May. Second level rises to leader 44 feet May. Second level rise on leader between one and four 20 feet May, 75 feet June. Second level crosscut to west 55 feet May. Second level second rise east 4 feet June. First level rise on leader east 42 feet May, 79 feet June. First level boxhole and intermediate drive 43½ feet May. First level intermediate drive on leader 5 feet June. First level rise on leader west 11 feet June.—Mine No. 8. Driving first level 91½ feet May. Driving second level 33 feet May, 114½ feet June. Driving third level 30 feet May. First level intermediate east 27 feet May, 112 feet June. Second level fifth rise east 11 feet May. Total for May, 1007½ feet. Total for June, 1011 feet.—Ore developed, Mine No. 4. First level 1400 tons May, 1100 tons June. Second level 3500 tons May, 200 tons June. Fourth level 8130 tons May, 2370 tons June.—No. 8 Mine. First level 345 tons May. Second level 2015 tons May, 2100 tons June. Total 15,300 tons May. Total 5800 tons June.—Ore in sight. Mine No. 4. First level 51,690 tons for May, 32,750 tons June. Second level 12,455 tons May, 12,765 tons June. Third level 12,836 tons May, 16,339 tons June. Fourth level 34,578 tons May, 25,58 tons June.—Mine No. 8. First level 17,573 tons May, 15,961 tons June. Second level 25,578 tons May, 29,306 tons June. Total 142,887 tons May, 141,319 tons June.—Mine No. 4, new main shaft. The timbering between second and third level is completed. The box hole at third level station has been bolted out.—Old main shaft. Between the sump at the fourth level and the west drive a large room is being broken out to allow the main pump and motor to be placed there. The drives have been continued by hand drill and are 22 feet and 2 feet respectively to the east and west.—Fourth level east. The drive has been continuous and wide for the whole month.—Fourth level east. At the end of the drive a rise has been worked to a height of 57½ feet, and is to be continued to about 100 feet, when it will be met by the corresponding veins from the upper levels. The reef here has been very rich throughout and about 2 feet wide.—Second level west. The drive has crossed through the main dyke, which proves to be about 100 feet wide. The direction of the drive has been turned to the north in order to cut right angles the quartzite formation, and to reach as soon as possible the reefs, of which the southern one, it is hoped, will be found at a distance of 300 or 400 feet.—Second level east. The main reef here is patchy and small, but some of them prove exceedingly rich. The third rise has been connected, and the second rise, between the two dykes, started at a place where former sampling showed a 4 feet rise. The first shot exposed a good reef 2 feet wide.—First level east. The main reef leader drive has been connected between the two shafts, and is being cleared out.—Mine No. 8, main shaft. The timbering of the shaft below paved level has been completed. Work at the third level will be restarted at the end of next month, when the rails will be laid down.—Second level east. The progress this month has been 114½ feet, bringing the total length up to 155 feet, the average width of the reef being 3½ inches, the footwall leader being 3 inches, and the hanging wall leader being 3 inches wide, with 2½ inches of quartzite sandstone between. The yield in gold has kept a very good average.—Stamp mill, 50 stamps ran days and hours, 22½ April, 24 May, 11 June. Ore crushed 3600 tons April, 3700 tons May, 4050 tons June. Crushed peat per day of 24 hours 3½ tons April, 3½ tons May, 3½ tons June. Gold won (plates and concentrates) 1173 ounces April, 1143 ounces May, 1277½ ounces June. Average yield of gold from plates and concentrates 5½ dwt. per ton April, 6 2 dwt. per ton May, 7 2 dwt. per ton June.—Battery. Delays were caused by the worn out state of the stamping pump, and in the several breakdowns of the old pump at the dam. Ore at surface. The reserves of ore at grass have been increased from 670 tons last month to 2020 tons. It is the intention to increase this reserve to about 8000 or 10,000 tons within the next few months, so as to be able to meet with eventualities when the new battery commences working.—Cyanide works. Tonnage treated 3730 April, 3750 May, 160 June. Yield 417½ ounces April, 405½ ounces May, 435½ ounces June. Cost per ton 34, 34, April, 34, May, 42, 42, June. Actual extraction 67 per cent April, 65 per cent May, 65 per cent June. Assay value of tailings 2½ grains April, 2½ dwt. May, 3½ grains June.—Cyanide works. The old tailings reservoirs have all been treated. The battery slope cannot supply the full capacity of the cyanide plant, which exp. aims the falling off in the output. Native labour is still plentiful, but the contemplated reduction in wages was not fully executed, as the old and best boys started leaving in great numbers. It is hoped to do it with success since the miners at the end of July.—New works. A great deal of work has been done on the headgear, hoisting engine house, and battery. Mill engine has arrived, and is now being erected.—Assays. List of assays included herewith.—1. Cost of production and cost per ton milled June. Mining £3205 13s. 11d., 15s. 9d. per ton. Transport £15 10s. 1d., 16s. 9d. per ton. Milling 2329 1s., 24½ d. per ton. Maintenance £581 10s. 6d., 14s. 9d. per ton. Redemption £701 13s., 15s. 9d. per ton. General charges £242 9d., 15s. 9d. per ton. Total costs £5495 13s., 21 7s. 1d. per ton. Cyanide works £725 9d., 15s. 9d. per ton. Total costs £6284 1s., 18s. 6d. per ton. Realized per ton 61s. 6d. Profit per ton, less 3s. 6d.—2. Revenue June, Gold at 73s., 1d. 1276 ounces, £4230 0s. 1d. value. Cyanide process 550 ounces, £112 11s. 7d. value. Total £272 11s. 7d. Rent 231. Permanent works £1093 1s., 4d. Development £3317 1s., 6d. Buildings £218 1s. 6d. Machinery and plant £5947 9s. 7d. Furniture £81 12s. 6d. Live stock £25 1s. Total £14,152 8s. 7d.—Development assays for month of June, Mine No. 4. Fourth level east drive width of reef 23 inches, assay value 10 dwt. 5 grains, width of stop 30 inches, value over stop 7 dwt. 1 grain. Fourth level first, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th, 101st, 102nd, 103rd, 104th, 105th, 106th, 107th, 108th, 109th, 110th, 111th, 112th, 113th, 114th, 115th, 116th, 117th, 118th, 119th, 120th, 121st, 122nd, 123rd, 124th, 125th, 126th, 127th, 128th, 129th, 130th, 131st, 132nd, 133rd, 134th, 135th, 136th, 137th, 138th, 139th, 140th, 141st, 142nd, 143rd, 144th, 145th, 146th, 147th, 148th, 149th, 150th, 151st, 152nd, 153rd, 154th, 155th, 156th, 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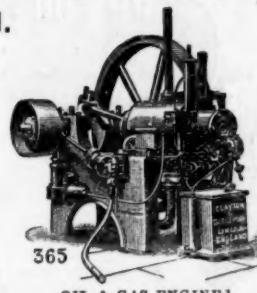
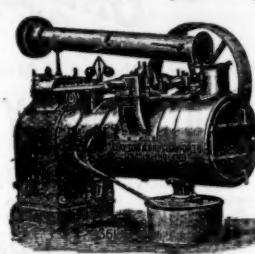
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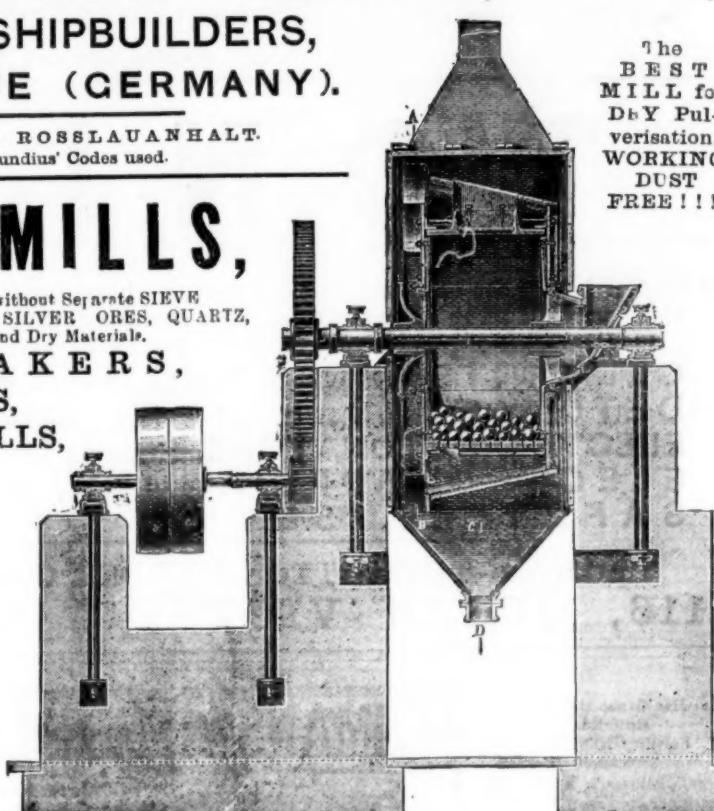
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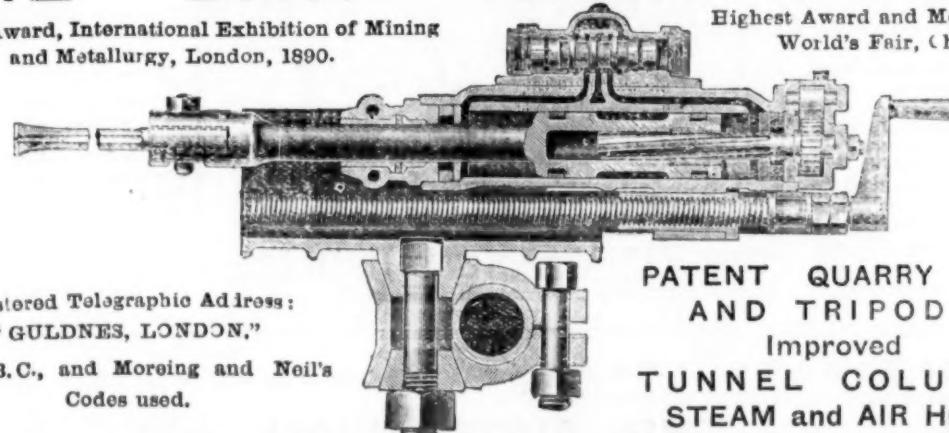
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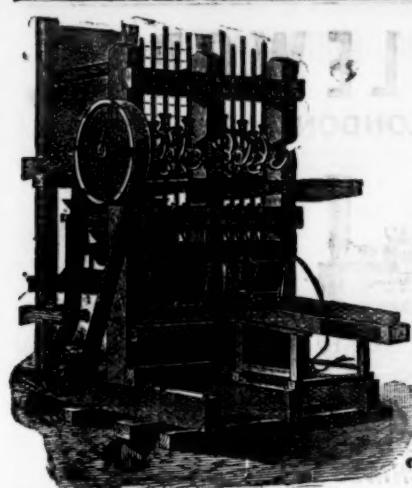
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SIRS.—Elliman's Royal Embrocation is used in my stables; think it very useful.

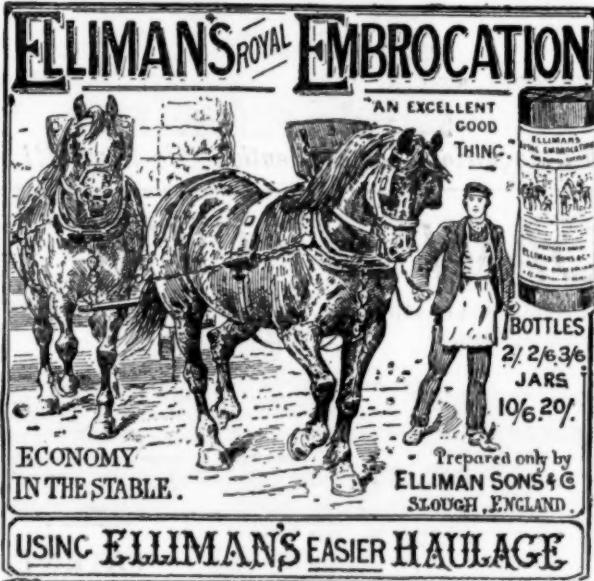
RUTLAND.  
Master of the Belvoir Hounds.

From the Earl of Harrington.  
January 9th, 1889.

SIRS.—Elliman's Royal Embrocation is used in my stables, and I consider it the best that I can obtain. HARRINGTON.  
Master of the South Wilts Hounds.

From Major M. J. Balfe,  
South Park.  
June 16th, 1892.

SIRS.—Elliman's Royal Embrocation is used in my stables, and I can highly recommend it.  
M. J. BALE.  
Master of the Roscommon County Staghounds.



From Lord Haddington, Tyn  
ingham, Prestonkirk, N.B.  
December 27th, 1885.

SIRS.—Elliman's Royal Embrocation is used in my stables, and I consider it indispensable in any stable, but especially in the stable of a Master of Hounds.

HADDINGTON.  
Master of the Berwickshire Hounds.

From R. Burdon Sanderson Esq., Warren House, Belford.  
July 10th, 1892.

SIRS.—Elliman's Royal Embrocation is used in my stables and I consider it very useful.

R. BURDON SANDERSON.  
Master of Percy Foxhounds.

From Wm. J. Buckley, Esq.,  
Penyfai, Llanelli.  
July 16th, 1892.

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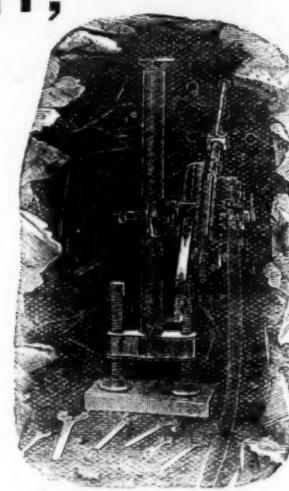
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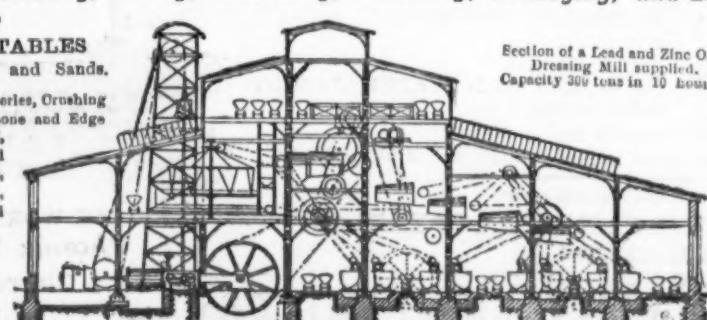
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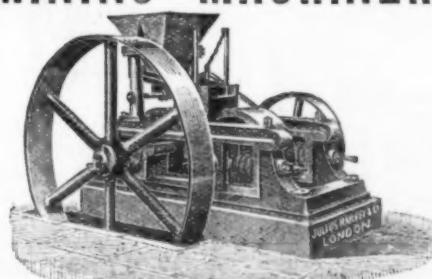
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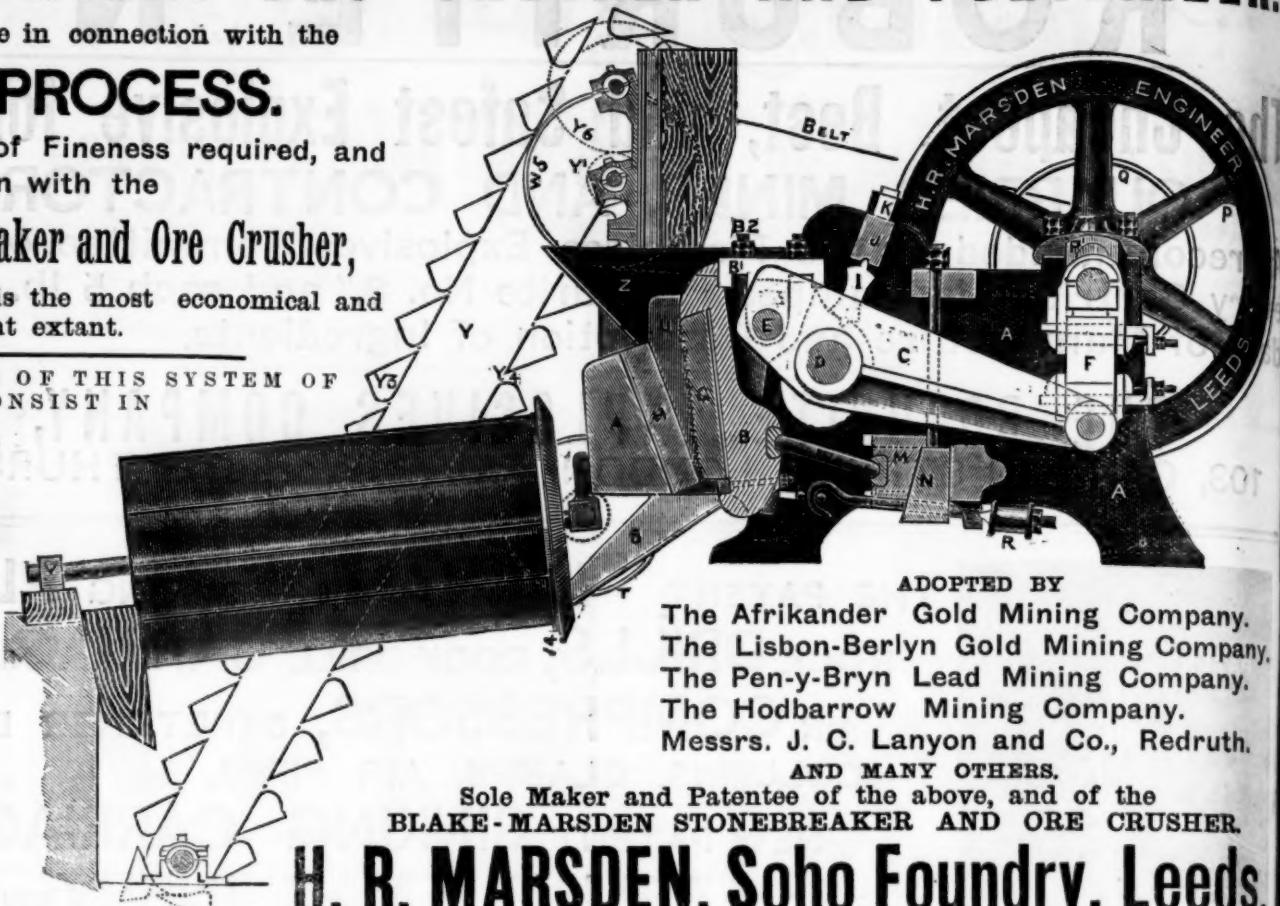
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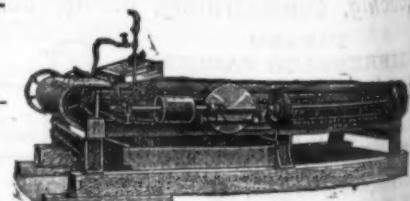
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